PREFACE.

Nearly everyone who views the fate of his fellow creatures with real compassion must experience a deep despair at the sight of the misery which prevails around him.

The multitude has, indeed, so far accustomed itself to this unhappiness, its concomitant circumstances and results, as to jump to the false conclusion that there is no remedy, and that poverty, sickness and misery cannot be banished from the world! Even I myself once belonged to those who were satisfied with such a narrow-minded view. It seemed to me inevitable that an [illegible] so advanced as ours, which had made in all [illegible]artments such wonderful discoveries and in which the advancement of the general welfare of mankind played such an important part, would not remain behind where the mental and physical weal and woe of self is at stake.

The more, however, I studied the rules of th[illegible] of Nature, and the more I followed them, the more was the painful conviction forced upon me that mankind of to-day is, as it were, struck wit[illegible] when it is a question of protecting oneself from sickness or of healing oneself of such ailments as have been systematically contracted. At the slightest cold the doctor must be called in; if he gives the ailment a foreign name and prescribes a few mysterious medicines, the patient is satisfied. Why is the Natural Method of Healing regarded with so little attention and consideration by the people?

MERELY BECAUSE ITS LAWS ARE TOO SIMPLE.

For with the simple prescription of diet, water, air Natural Healer cures all diseases, of whatever standing, are curable; for this method of treatment requires that sufficient vitality of the body to enable a reaction to fo[illegible] to be got over.

The above-mentioned four fundamental healing stant, but the forms of their application vary infinit[illegible]

and gradation. And what does the Natural Healer require of his patients? Nothing but absolute confidence in his method, the only correct one, unswerving obedience to his instructions and a firm will. If the patient possesses these qualities, the Natural Healer can generally guarantee a perfect cure.

But how is it to be expected that the multitude should feel themselves drawn toward water in the days of sickness, when in time of health they view it with a certain repugnance? And how many never take a bath at all!

The purpose of this work is to gradually impress the immense value of the Natural Method of Healing on the public, who turn their backs upon it, not because they know it, but because they do not know it. Consequently it is necessary to place before them something useful and sensible rather than such rubbish as is to be found in prospectuses and advertisements of pills, potions, painkillers, etc., which are so often nowadays imposed on a credulous public.

However, it is highly improbable that an exhaustive treatise on the Natural Method of Healing will meet with the appreciation to which its subject should enti[illegible]. Therefore, to make this work even more useful, I have append[illegible] the article on the Natural Method of Healing a number of paragraphs which must be of the utmost practical value for all, containing as they all do full directions as to Mixed Diet (preparation of food), Curative Gymnastics, Lung and Breathing Gymnastics, Ventilation, Massage, Artificial Respiration, Diseases of Women, Swimming, Mushrooms and Magnetism, with upward of seven hundred illustrations.

I have also done all that is possible to ensure the general adoption of this book and the Natural Method of Healing, and for this purpose I have collected numerous reports of cures, which are the best testimony of the efficacy of the Natural Method of Healing.

For all who know how to appreciate it, this book will be a faithful [illegible]ys of sickness and of health.

[illegible]artfelt conviction with which I have written this book [illegible] to my joy and to the benefit of my fellow creatures.

[illegible]nl, July, 1900.

F. E. Bilz.

BILZ,

The Natural Method of Healing.

VOLUME I.

MOTTO: „Wasser thut's freilich, höher jedoch steht die Luft, am höchsten das Licht."

Water is a potent factor in healing, still more so is fresh air, and light most of all.

THE

NATURAL METHOD OF HEALING AND ITS MERITS.

THE READER SHOULD CONSULT THE CHAPTERS:

"THE NATURAL METHOD OF HEALING," "GENERAL PRINCIPLES OF THE NATURAL METHOD" AND "MODES OF APPLICATION."

Introduction to the Natural Method of Healing.

1.—During a water treatment in any form, the body, and more particularly the feet, must be sufficiently warm; the patient should therefore never be treated when he feels chilly.

When the skin is cool he must try to produce warmth by friction with a dry towel, by dry packs, exercise, going to bed, foot-steambaths, foot-steambaths in bed, etc. The most suitable time, therefore, for treatment with water is generally after getting out of bed in the morning, when the patient is sure to be warm.

2.—Applications, as for instance, stimulating compresses on the whole or parts of the body, packs, etc., are also suitable immediately before going to bed.

3.—A cool room must be warmed before any form of water treatment be undergone by a patient in it.

4.—No application must take place either shortly before or shortly after meals, more especially those forms of treatment calculated to greatly stimulate the body.

5.—No application must take place after unusual excitement or exercise, which puts the blood in motion; the tranquillity must first be restored to avoid injurious results.

In cases of fever, on the other hand, when the blood is constantly in motion, a judicious treatment will, on the contrary, be very beneficial.

6.—After a water application (packs, baths, etc.), care must be taken to speedily restore warmth by exercise, friction, bed, hot water bottles, etc. The two latter means should only be resorted to when the patient is too weak to acquire warmth by bodily exercise.

7.—After a warm bath, steam-bath, as well as after stimulating and warm packings, compresses, a cooling down of the body must follow in the form of douche baths, affusions, irrigations, lavations with cool water, to prevent catching cold.

8.—After any application of water a pause must be made before a second treatment can take place, long enough for the body to completely recover its warmth, and until an agreeable sensation of comfort has supervened. It should be the aim, therefore, to attain this object speedily. Above all, however, the patient should not be importuned to exert himself too much, but time and rest should be allowed him to act on his own initiative.

9.—It is advisable to give the patient fresh water to drink occasionally, large quantities should never be taken at one time, but rather an occasional sip, but not contrary to his inclination. (The water may be given a little warmer if he so desires.)

10.—A sick person must abstain from stimulating food, in many cases allowed only invalids' diet. (See Article on Diet.) Neither must he, on any account, eat too much, nor too often. (It was Professor Trall, as far as we remember, who made the remark in his book, that he had worked wonders in many chronic cases by allowing the patients not more than one or two meals a day.) But in this respect also it is advisable to avoid extremes.

11.—The utmost care should be taken to ensure sufficient and, more particularly, efficient attendance. Many—nay, most of the fatal cases which occur after the adoption of our treatment happen through the lack of expert attendants. Moreover, the sheets, blankets, baths, compresses, as well as a syringe or irrigator (little can for rinsing), wanting in a good many families, should be of a proper size to be really useful, because a favorable result is only attainable by strictly adhering to our instructions. The utmost cleanliness is necessary in the use of linen and silk compresses. A double supply of materials for packs should always be at hand, so as to ensure clean cloths for every packing. The cloth which has been in use, and which in consequence has absorbed a great deal of impure water, must be put into tepid water, well washed, and after having been rinsed in cold water, be hung up in the open air to dry. When the packs are frequently changed, the same sheets, after being well washed in tepid water, may be

immediately used again; but, of course, they must first be put into the water meant to be used for the packing, and then wrung out. Still, it is advisable, for the sake of cleanliness, to pay attention to the above suggestion. The blankets, too, must be hung up in the open air occasionally. We request the strictest adherence to these instructions, as in these points particularly the greatest mistakes are committed.

12.—Let the patient always have requisite rest, and let fresh air be provided in the sick room. Before entering upon the treatment, it is necessary to be quite sure in every case of illness whether to apply stimulating, soothing, cooling or deriving forms. To carry a case to a successful issue, not only should the few lines bearing upon the particular illness be read (otherwise much benefit may be missed), but everything that is said in other parts of the work and under different heads about the suitability of the measures recommended for patients with different constitutions, of different ages, sexes, etc., and more especially all that relates to the vital power of the particular patient. The more the book is studied the more perfect will be the insight which the reader gains into what he is to do and what he is not to do in a particular case. For this reason the book should not merely be consulted when illness knocks at the door, but in the days of health, when there is leisure to gain information and enlightenment. It is then that the telling force is felt of the good English proverb: "Forewarned, forearmed!"

13.—Never disturb a patient in his natural sleep to make any application whatever being an injunction we would impress upon every sick-nurse. There is not a more beneficial remedy for illness than sleep. It frequently happens that the severest illness takes a favorable turn in consequence of a sound sleep. Exceptions are, however, admissible in cases of fever patients, because the sleep is only apparent, and sleeping fever patients with a very quick pulse, say, one hundred and twenty beats a minute, must, according to the plan of treatment, be placed in a cool packing, bath, etc.

Breathing fresh air also exercises a most rapid and beneficient influence on a patient. The window in the sickroom should, therefore, be open. Let it be shut while the patient is being bathed, or is undergoing a fresh packing. It may be closed now and then, if the cold outside is very intense, because a certain amount of heat is required by and is beneficial to some patients. Let those able to walk enjoy the open air as much and as often as possible.

14.—Mild baths (92° to 94° F.) should be the only form of application to patients who are too weak to get warm again quickly. In such cases an invalid has first to be strengthened by a preliminary tonic treatment (see this article) to render him more capable of resisting cold before passing to a proper course of water treatment.

15.—Reaction is called forth in persons who are at all capable of producing it in the proportion as the water is cold—i. e., the colder the water the more rapidly and the more abundantly does the blood, repulsed for the time by the stimulating cold, return to the surface of the body and to that part which is under treatment.

16.—Be it observed, that bathing with warm water, warm compresses or baths above 100° are seldom applied and rarely to be recommended, because (a) the skin gets relaxed by them, and (b) the activity of the nerves is lowered, the process of assimilation, instead of being promoted, is arrested and interfered with.

It is only as an alleviating agent, when there are violent pains, that warm water may be applied as a necessity, and then only for a short time, because of its nerve-soothing, cramp-stilling properties. (See hot packs.)

17.—A patient undergoing a detergent or deriving course of treatment (such as hip-baths, foot-baths, foot-steambaths, etc.) must not read during an application, because mental exertion draws the blood to the head and makes electricity active in the brain.

18.—The symptoms accompanying an illness, such as are indicated in each particular case, may all appear simultaneously or only one at a time.

19.—The patient is enjoined to be of good cheer and as hopeful as possible, for that, too, is an important factor in the work of healing. A patient full of faith and hope regains convalescence far more easily and far sooner than one who is despondent. For implicit faith in the physician and his treatment is half the battle, and not seldom the whole battle. It is therefore well to inspire the patient with hope and courage by telling him truly that our natural method of treatment effects absolutely miraculous cures. Thousands of patients, given up by medical men, have been cured by our method. On this subject we refer to the many successful results (reported cases of patients) enumerated at the end of each article. A patient should never be exposed to cares and vexation.

20.—If alleviation, improvement and cure do not immediately result, let our natural treatment nevertheless be quietly proceeded with—i. e., a suitable course, such as a clever Natural Healer would prescribe in all critical cases. The result will, without fail, be satisfactory. At any rate, the patient will always save at least half the time (in most cases more) required by a regular allopathic practitioner.

21.—Although an application is or may be made even for slight indisposition, it is not right to plunge headlong into a course of treatment, or to go to bed and fancy that it is a serious case of illness, as happens with a good many people. Imagination plays a great part. The philosopher Kant says: "The inclination to be ill is wrong, for the will can effect a

great deal. To exercise the will is to exercise the nerves." It would often be very much better to keep in motion, perhaps to take a walk in the open air, or to try gymnastics indoors, or the gymnastic breathing exercises with the window open.

The disturbances in the system may have been caused by lack or insufficiency of bodily exercise, and can therefore be quelled by proper activity (gymnastics, etc.). Very active housewives, mothers of many children have often no time to fall ill, because they have plenty of work and exercise. Even when the disorders result from other causes they are mostly removable by means of general gymnastics. But also too much mental or bodily exertion and overwork often lead to irregularities in the human system. Rest is the one thing most needed here.

22.—Children showing an aversion to an application should never be treated harshly. Rather use water a few degrees warmer at the commencement, and try by gentle means to induce them to get into a bath, pack or compress. Allowing children to get highly excited, as often happens through injudicious treatment, often causes more harm than good, but when they cry from sheer naughtiness an application once considered imperative should be carried out. The treatment of a child must be very carefully considered, in order to induce it to do what is required. We must to a certain extent have regard to its individuality—i. e., take its peculiarities into consideration. We often find that children, who get excited when being packed by their parents, will quietly submit to the treatment when carried out by some one else. We urgently advise the reading of the article on "Children, Diseases of."

23.—For patients accustomed to a colder treatment the given temperatures in the various courses of treatment may be reduced by 2°—4°. On the other hand, for such patients as are very emaciated, feeble or suffering from poverty of blood, and children and adults who are afraid of water, may, under some circumstances, be treated with water of 2°—4° higher temperature than prescribed.

24.—Whoever adopts the natural treatment and yet takes medicine in addition, as is done sometimes, greatly impedes and prevents recovery—nay, often renders a cure quite impossible.

25.—See also: 1. "Fever Treatment"; 2. "A Few Hints on the Natural Method of Healing in General"; 3. "Precepts and Sayings"; 4. "Forms of Treatment for All Kinds of Diseases"; 5. "Massage"; 6. "Cases, Reports of"; 7. "Concluding Remarks." (See Index.)

We also advise the reading of the various articles on the nursing of patients, non-stimulating diet, patients' diet, and its appendix, as well as

the treatment of fever; stimulating enemata in constipation, costiveness, massage of the stomach and curative gymnastics. At the same time the reader, when looking for the form of treatment, or may be for other articles arranged in alphabetical order in this work, is advised to look through the index, as the contents of this work are indicated there more fully than was possible or practicable in the alphabetical order in which the book is arranged.

26.—Each form of treatment, as given after the description of each disease, is in many cases doubly efficacious when combined with a course of massage performed by an expert. For this reason it is well to peruse the article on massage several times, and other books on the same subject should be read, too, and the illustrations well examined in order to become by degrees fully familiar with the topic.

The forms of treatment given here should be applied most scrupulously. First and foremost, never indulge in exaggeration; small means often effect great results. It is nature that cures, not we. In serious cases everyone who has not yet mastered our system of cure should always consult a physician, an advocate of the natural treatment (not a medical man, eager to apply his physics). If such a one is not at hand, it is a more imperative duty to become as speedily as possible conversant with the method of the natural treatment. If the correct course be pursued at once the malignant character of the disease will in most cases yield to a milder one in a comparatively short time. With wrong treatment, however, the disease will get worse, or at best be protracted. The principal point, therefore, is to have due regard to the patient's individuality—*i. e.*, to consider well what forms of treatment are the most suitable for him in his condition, and there is no doubt that one who is at home on this ground will be better able to determine this than an uninitiated person.

In order to obtain a correct view of this method of healing, and before being able to act with intelligence, it is all-essential to know that it is not the remedies we apply which cure, but that the power of healing resides in man himself. Divine nature placed it there at the creation of each being. Thus it is not necessary that we should swallow this power of healing, this vital power, in the shape of physic, pills, decoctions, etc., or to apply it to the limb of a patient by means of a plaster in order to affect a cure. No, this power has long been inherent in us. It is this self-same vital power (called here power of healing) that preserves our life from day to day, from year to year, and manifests itself daily and hourly, at the same time healing the countless injuries, disorders and diseases which befall the body, and adjusting them.

Our only task then is to aid this vital power, and the subject of this present work is to thoroughly teach how it may be done.

Now that it is known that we cannot heal a disease with the remedy we apply, but that it is the vital force within us which heals, and that we need but aid it, our position becomes a far easier one. We can approach the sick-bed with greater composure, with the calm consciousness that nature ever takes the right road to heal a disease. To further this healing process we must refrain from placing obstacles in its way by withholding the principal elements, viz., fresh air, light and water, or, worst of all, by taking medicine. If we do this we impede recovery and cause the diseases to assume a more malignant form and to terminate fatally.

Many thousands of diseases might have been avoided if nature had not been hampered and prejudiced in her mild healing process. Millions of severe cases of illness would have been thoroughly cured if, at the commencement, a proper natural treatment had been employed. In the interest of every sufferer let us hope that the day may speedily dawn when a change in the treatment of diseases will be made. Then will those who have recovered from illness be healthier than they were before their sufferings, and subsequent illness, now a corollary to medical treatment, will be a thing of the past. Illness will be limited to the shortest possible duration, the fear of dangerous and contagious diseases will subside, and bodily ailments almost entirely disappear in the course of time, since humanity will, with the spread of our natural method of healing, have found the key to the problem of our great reforming movement—the prevention of disease.

DISEASES OF ALL KINDS

IN ALPHABETICAL ORDER.

As many diseases make their appearance in an "acute" form (i. e., inflammatory, running a quick course), and "chronic" form (i. e., lingering, returning), both forms, the acute and chronic, are treated of separately, for the purpose of bringing them clearly into view.

A.

ABDOMINAL COMPLAINTS. This term is applied to the diseases, inflammation and displacement of the female sexual organs—e. g., vagina, uterus, ovaries, which usually have their origin in an irrational mode of dressing, tight lacing, etc.

The treatment of these diseases will be found under the various headings.

In general, daily cool or tepid hip-baths, syringing, local compresses, internal massage by the Thure Brandt Method, as well as a treatment of the whole system are advised.

In a wider sense, affections of the organs lying in the abdominal cavity—e. g., stomach, liver, intestines, bladder and kidneys are understood by the term abdominal complaints. For treatment see the various headings.

An effective auxiliary to stimulate the abdominal functions is massage, by kneading the abdomen. It is performed with the patient lying in comfortable dorsal position, in which the abdominal muscles are least exerted (best in the morning and in bed). The thumbs are placed on the sides under the ribs, a good way back, and form the fulcrum from which the outspread fingers of both hands manipulate the anterior surface of the soft abdominal covering, and by turns vigorously knead the abdomen for a few minutes. Still greater stimulation is afforded by the vibration by pressure, in which the entire surface of both hands presses the abdomen down simultaneously and then being quickly removed produces a vibratory rebound of the elastic abdominal covering and its underlying intestines. The most forcible stimulation is created by beating the abdomen with the fists for several minutes. If the abdominal pains are not accom-

panied by inflammation—as in convulsions, colic caused by flatulence, and such like complaints—friction of the abdomen simply with the flat hand on the bare skin, especially circular friction of the region of the navel, continued for from five to ten minutes, affords great relief, and if performed regularly serves besides to increase the sluggish action of the abdominal organs. All who suffer from slow circulation of the blood in the portal venal system are recommended in addition to resort to continual deep respiration, as the best means of assisting the veins, most subject to stagnation, in getting the blood pumped up straight into the lungs.

The position of the body in bed of patients afflicted with chronic abdominal complaints also requires consideration. The dorsal position, which is most conducive to health, because it admits free, unimpeded breathing, is here, too, the best one, because the abdominal organs are thus least exposed to pressure, and because the whole body does not lapse so easily into those cramped-up positions which may be assumed when the patient lies on his side. Especially when organs like the liver and spleen—situated in the side of the body—are chronically affected, it is necessary to avoid the right lateral position in the first case, and the left lateral position in the second. Patients suffering from abdominal complaints, when they are sitting for some time, must guard against crossing the legs.

In long standing complaints of the stomach, liver, etc., "Curative Gymnastics," particularly Group I, more especially chopping movement and lateral body movement will be found highly beneficial.

ABDOMINAL PAINS are sometimes assignable to direct causes, such as poisoning, peritonitis, intestinal inflammation, gall-stone, gravel, hernia, defective menstruation, etc. Frequently, however, they are merely the result of a cold in the intestines, excessive accumulation of gas in them, constipation, colic combined with diarrhoea, etc.

TREATMENT.—First treat the original disease, next apply stimulating abdominal compresses and enemata, also steam-bath in bed, or box-steam-bath, the latter to be followed by full pack, and both by lukewarm bath (88°). In cases of diarrhoea the best applications are massage (pressing, kneading, stroking) and hot compresses on the abdomen. For internal inflammation use soothing compresses. See "Colic," Inflammation, etc. For treatment with massage, see "Colic." (For Modes of Application, see Index.)

ABDOMINAL COMPRESS. See Index.

ABDOMINAL PACK OR BANDAGE. See Index.

ABDOMEN AND INTESTINES, Organs of the. See "CHEST AND ABDOMINAL CAVITY, ORGANS OF THE."

ABDOMEN, Inflammation of the (inflammation of the intestines, liver, kidneys, spleen, peritoneum, etc.).

TREATMENT.—Apply soothing trunk-compresses, 60°—70°, folded once or twice, according to the heat, and wrung out more or less dry. Change them as patient desires every hour or two, and continue them as long as there is any inflammation. Apply at the same time stimulating, tepid (69°) foot and leg-packs, the duration of which must depend on patient's condition, say, one and a half to two hours. Rub the legs (69°) afterwards and knead them vigorously. One or two sponge baths (73°) (morning and evening), should follow, and a small cool enema, from half to three-quarters of a cupful of water, every three or four hours. If there be much fever apply only a three-quarter pack with extra compresses on the abdomen for about one hour at a time. For cold feet use a hot water bottle (see Art.) filled with boiling water and wrapped in damp flannel. Ventilate well by keeping the window open, and give only cool, non-stimulating food. See also Peritonitis, Enteritis, etc. (For Modes of Application, see Index.)

Abdomen, Massage of the, see Index.

Abdomen, Rupture of the, see "RUPTURE".

Abdomen, Spasm in, see "KNEIPP CURE".

Abdominal Rupture, see "HERNIA".

Abdominal Troubles, see "KNEIPP CURE".

Abortion, see "WOMEN, DISEASES OF".

ABSCESS. An abscess is the result of some local inflammation which causes pus to form, and develop in a confined space. There are two kinds —hot and cold abscesses. Sometimes the pus contained in an abscess sinks by its own specific weight to some distance from the seat of the inflammation.

SYMPTOMS OF THE HOT ABSCESS. These are redness, swelling, pain, loss of elasticity, increased temperature and feverishness. THE COLD ABSCESS, which develops slowly and without pain, shows a red color and higher temperature, and is met with in persons whose "physique" is weakened, and who suffer from poor and diseased blood.

TREATMENT.—If the abscess is only forming, try to mitigate and disperse it by steam-baths in bed, and extra compresses on the affected part. If in a more developed and matured state it must be steamed several times, and covered before and afterwards with local tepid compresses, very wet (66°—77°), either soothing or stimulating, according to the patient's condition. The compresses must be changed when dry and troublesome to the

patient. (The linen used for the compresses must be folded two or three times, or even more.) If the pain is excessive only soothing compresses must be applied, and constantly changed if the pain increases. Lancing or pricking the abscess is rarely necessary. With this treatment the abscess always opens of itself. See "BAD HEALTH."

Lancing may sometimes be necessary in cases where the skin is hard and horny—e. g, in the palm of the hand, or if the pain, which often increases in violence, in consequence of increased collection of pus, becomes intolerable. The patient must confine himself to non-stimulating diet and avoid all spirituous liquors as well as tea and coffee. When the abscess is of long standing, or returns repeatedly, give some stimulating full or three-quarter packs, and then apply steam and steam-baths in bed, together with soothing extra compresses on the abscess. When the blood is bad—a frequent cause of cold abscess—formation of better blood must be aimed at by a strengthening or regenerative treatment. (For Modes of Application, see Index.)

ACCIDENTS, First aid in. Every help should be undertaken with presence of mind and composure without haste and hurry.

The Transport of an injured person can be accomplished as shown in figures 1 to 6.

APOPLECTIC FIT. Remove all tight clothing. In case of determination of blood to the brain (dark red complexion) place the head in a raised position. Then 72° compresses round the head and neck to be changed on getting hot. Leg pack of 68° with hot-water bottles to the feet, calves and thighs (77°), enema one pint and frequent swallowing of water a mouthful at a time. Call in a Natural Healer as soon as possible. See also "APOPLEXY."

ARTIFICIAL RESPIRATION plays an important part in many casualities, drowning, suffocation and so on, see Index.

BANDAGES should be arranged so as not to be tied tightly at any place, but if they are they should not remain so long, otherwise a severe swelling of the part below the bandage will soon arise, and if not relieved in time mortification will set in (see Fig. 13). See also under "BLEEDING."

BITES OF MAD DOGS or other animals suspected of rabies. Stop the circulation at once above the wound by means of pocket handkerchiefs, string, etc., so that the poison may not penetrate further into the body. The wounds should be cleansed with cool water, and cool stimulating extra compresses applied immediately. Try by quick walking, box-steambath or steam-bath in bed with extra compresses on the wound to promote

profuse perspiration. Packing and steam-baths to be repeated for some days. See also "HYDROPHOBIA."

BURNS. Spread the white of an egg over burns, or lay on them pieces of linen dipped in salad oil, and apply very wet compresses which must be changed every ten to fifteen minutes. Grated raw potatoes or curds may also be put on them. If articles of clothing should catch fire, the burning person should immediately throw himself down and roll on the ground or instantly undress if possible, or he should be tightly wrapped in a cloth, carpet, etc., thrown on the ground and rolled over and over to stifle the flames. If considerable parts of the body are burnt and a Natural Healer is not on the spot, then the injured person should be carefully undressed in a warm room. Pieces of clothing adhering to the body must not be torn off, but cut and carefully loosened in small pieces, so that the skin may not be still further injured; or, still better, immerse the burned places with the clothes for some time in water. Blisters should not be pricked. Baths of 90° to 92° soothe pain and induce recovery in cases of larger and more serious burns (the injured parts to be put under water). The formation of proud flesh can be prevented by cold syringing or cold compresses. See also "BURNS."

Transport of an Injured Person.



Fig. 1.

BLEEDING is best stopped with hot compresses, as hot as can be borne, as thus the whole vein is relaxed, the circulation arrested and coagulation of the blood follows.

A piece of cotton dipped in hot water may also be laid on the wound. In serious injuries to large veins it is necessary to tie up the limb above or below the wound with a handkerchief, pair of braces, belt, string, etc. (Figure 9). If such articles are not forthcoming, the bleeding may be stopped by pressure on the arteries (Figure 10), apply to a doctor immediately to tie up the arteries. See also "HEMORRHAGE."

BLEEDING AT THE NOSE should only be stopped when violent and weakening. Put cold water compresses round the head and neck, give trunk packs and warm foot baths. Rest with head in a raised position. In

some cases give a Kneipp neck affusion of 59°, one can-full. See also "NOSE, BLEEDING AT THE."

BLOOD POISONING. Wash the wounds well with water. Apply steam and packs locally, and if the poison passes into the blood, steam box-baths, steam baths in bed, etc. See article on "BITE OF A MAD DOG" and also on "POISONING."

CUTS AND SLIGHT WOUNDS. Cleanse by rinsing with warm water—if possible with water that has been boiled. Bring the edges of the wound close together, bandage with thick, wet compresses. Pain and bleeding can be stopped by hot baths and compresses. See "WOUNDS."

COLD, EFFECTS OF EXTREME, and FROST BITES. Carry the individual on a stretcher or litter, with a layer of snow underneath him, into a cold room with the greatest care lest parts of the fingers, nose, ears, etc., be broken off—frost bite renders the affected parts as brittle as glass.

Transport of an Injured Person.



Fig. 2.

A frozen person is irrecoverably lost if brought at once into a warm room. In the cold room he is carefully undressed, laid on a bed of snow a foot or two high, and the whole body well covered with snow, only the mouth and nose remaining free. He is left there until completely thawed and his limbs show signs of movement. If no snow can be obtained, then a

cold bath is given, with cautious rubbing, or he is carefully rubbed with cloths dipped in ice-cold water. When the frozen person recovers consciousness put him in a cold bed, and rub his body with warm cloths; warm the room very gradually, and avoid any rapid raising of his temperature. See also "EFFECTS OF EXTREME COLD."

CONVULSIONS AND FITS. Do not attempt to force open clenched hands, and take care that the sufferer does himself no injury by striking wildly about him. Loosen all tight clothing, sprinkle face, chest and back with cool water. Push a piece of cork or wood between the teeth

Transport of an Injured Person.

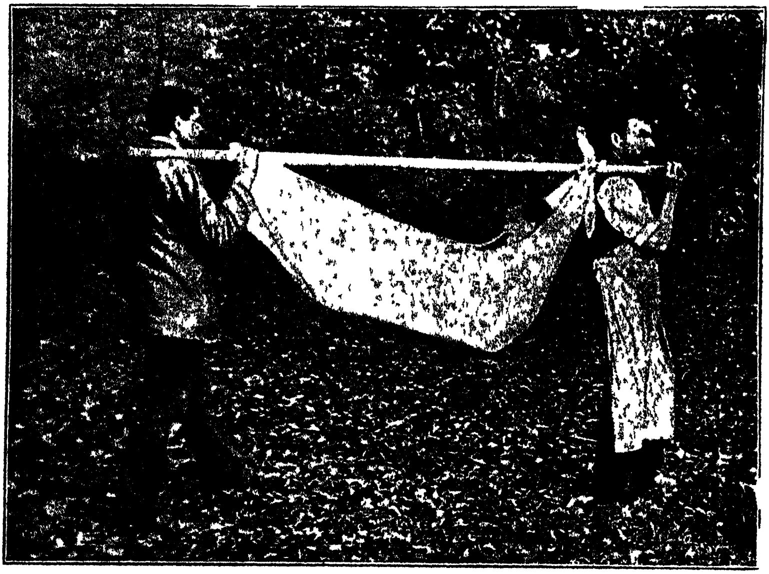


Fig. 3.

to prevent injury being done to the tongue. In case of ***convulsions with children*** open the bowels by means of enemata (86° one half pint), followed by an enema to be retained in the bowels of 68° (one tablespoonful). Massage of the abdomen from right to left. Warm bath of 93° accompanied by a thorough rubbing of the feet and legs. Water douches of 77° over the back. See Index.

CHOKING CAUSED BY FISHBONE, ETC. Try to remove the obstruction by means of the thumb and forefinger, or a pair of tweezers, or by tickling with a feather; or the forefinger may be introduced into the

Transport of [illegible]*red Person.*



Fig. 4.

Transport of an Injured Person.

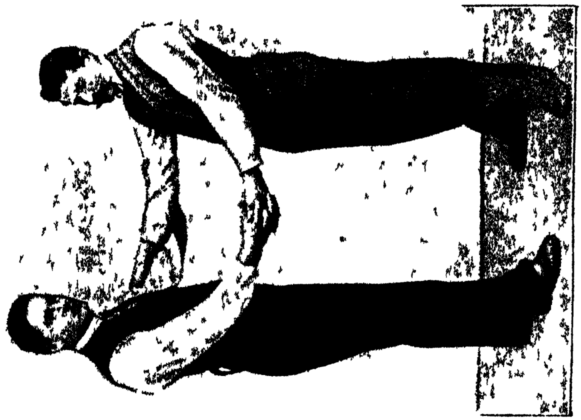


Fig. 5.

Transport of an Injured Person.

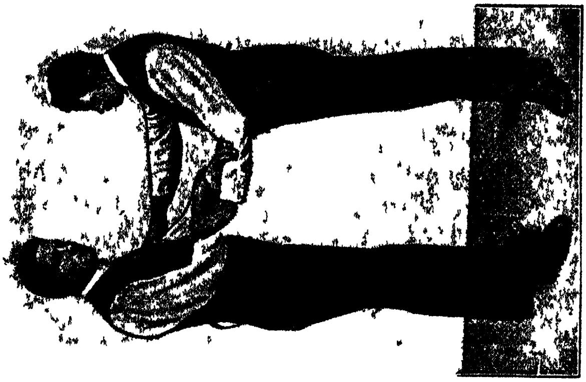


Fig. 6.

gullet to produce an inclination to vomit. Slapping the back between the shoulder-blades, the arms of the patient being raised. See Index.

Choking. If something has got into the windpipe, or gone the wrong way, as we say, during eating, then the arms should be kept stretched to their full extent above the head. By this means the chest is raised, the lungs assume another position, and so the obstruction can be more easily removed; very often the cause of the trouble is ejected at the first cough. For Modes of Application see Index.

Position of a Drowned Person While the Water Is Being Got Out of the Body.



Fig. 7.

Drowning. Do not put the patient on his head. Ease all tight clothing. Lay him over your knee, that his head be somewhat lower than the rest of his body. Fig. 7. Gently tap the back, in order to ... ve out from the lungs and stomach any water that may have been sw... ith cleanse the mouth and nose of mud. Apply artificial respiration ... ol- Index.) If the efforts to restore respiration are successful cov... n- patient up warmly, rub him thoroughly, and give him warm dri... 3° teaspoonfuls. ... es

Dislocations. Elevated position of the limb, and cold compress to be changed as soon as warm. They should be set by an expert, doc... or natural healer. See also "Dislocation" in Index.

EMETICS. See Index.

FAINTING FITS. Remove all tight clothing. Place the patient in a horizontal position. If caused by anemia of the head (the symptom of which is paleness) place the head lower than the chest. With plethoric patients (dark red complexion) the head must be raised and chest and back sprinkled with cool water and thoroughly rubbed. Take care that the patient breathes fresh, pure air. In case of determination of blood to the head, give enema, 77°, using half a pint of water. In severe cases artificial respiration should be resorted to. See Index.

FALL ON THE HEAD OR LOINS. Rest and soothing applications, lay the patient on the back, sprinkle face and chest with cold water; in severe cases seek skilled advice.

Tying up an Injured Brachial Artery.



Fig. 8.

Tying up an Injured Femoral Artery.



Fig. 9.

FEBRILE MALADIES. For first instructions see Index.

FOREIGN BODIES IN THE EAR. To remove these one should go to work very cautiously.

If an insect, little stone or pea has got into the ear, then a little oil, or a few drops of water are poured in, the ear is bent downwards to one

side, and the other ear struck lightly with the hand. See Index. If this is not successful, send for a doctor or Natural Healer.

Foreign Bodies in the Eye. Do not rub the eye. Make a spill of white paper, moistening the point a little, draw the under or upper eyelid downwards or upwards as the case may require, and remove the object by means of the spill, rinse afterwards with tepid water. A horsehair is even better than a spill. It is held by both ends, forming a bow like a hairpin, the eyelid drawn back and the object hooked out, without causing any unpleasant feeling in the eye.

If lime get in the eye, the latter should be washed out with sugar and water, or vinegar and water. See Index.

Squeezing the Jugular Veins With the Thumb in Cases of Violent Bleeding



Fig. 10.

Fractures. Get rid of all hampering articles of clothing, raise the broken limb, protect it from any jar or shock, put on repeated cold compresses till the arrival of the doctor in order to keep down the swelling. It has often happened that one who has attended a "First Aid" course has been very successful in treating fractures. Let every one then attend such a course, as he may thereby be of great assistance to his fellow creatures.

One should be careful what surgeon is chosen to set the fractured bone, and should beware of tight bandages (plaster of Paris bandages), of which Prof. Volkmann says that their employment only results in making cripples, and that untutored bone setters have often been obliged to make good what learned professors and specialists have made a mess of. In spite of the most correct bandaging, setting of a fracture will often be followed by pain which may be allayed by compresses, as hot as can be borne, on the part. Especial attention is here called to a new bandage for fractures, to be found under "Orthopaedia." See also "Fractures of Bones."

Heat-Stroke. Bring the patient immediately into a cool place, loosen all tight clothing and apply the following: Compresses (72°) on the head, to be changed when warm. Compresses (73°) on the region of the heart, rubbing, with a wet towel, of the feet and legs with water of the same temperature, or shallow bath (86°). Affusions on the back; enemata (77°). One pint of cool water to be drunk a spoonful at a time. Massage of the neck.

Hanging. The person should be carefully raised and not allowed to drop when the cord is cut, and if still warm and showing signs of life, artificial respiration should be resorted to. See Index.

Life-Buoy Being Thrown to a Drowning Person.



Fig. 11.

Lightning, Effects of. If there are any signs of life, all tight articles of clothing should be loosened at once, head, chest and back must either be rubbed or bathed with cool 59° to 64° water, and artificial breathing, if necessary, resorted to. See also "Struck by Lightning."

Hemorrhage. If the blood is bright red in color it comes from the lungs. Take care to ease all tight clothing or undress the patient, who should assume a sitting posture. Provide for pure, cool air. Pack as in blood vomiting. See also Index.

Mushroom Poisoning. See under "Poisoning."

POISONING. Immediately induce vomiting by tickling the gullet, or by introducing the forefinger into the throat as far as possible. Give warm water to drink, and in case that should not be sufficient, a lukewarm solution of soap in water is an effective and harmless emetic. After vomiting, sugared water or the white of an egg beaten up in milk may be given to the patient. In cases of poisoning by sulphur, saltpetre, or hydrochloric acid, powdered chalk in water or whitening should be given as an antidote. Drink milk, thick water gruel, meal and water, or salad oil. We can also recommend abdominal compresses and enemata 77° (a pint). See also "POISONING" in Index.

Throwing a Wooden Ball to a Person Who Has Broken Through the Ice.

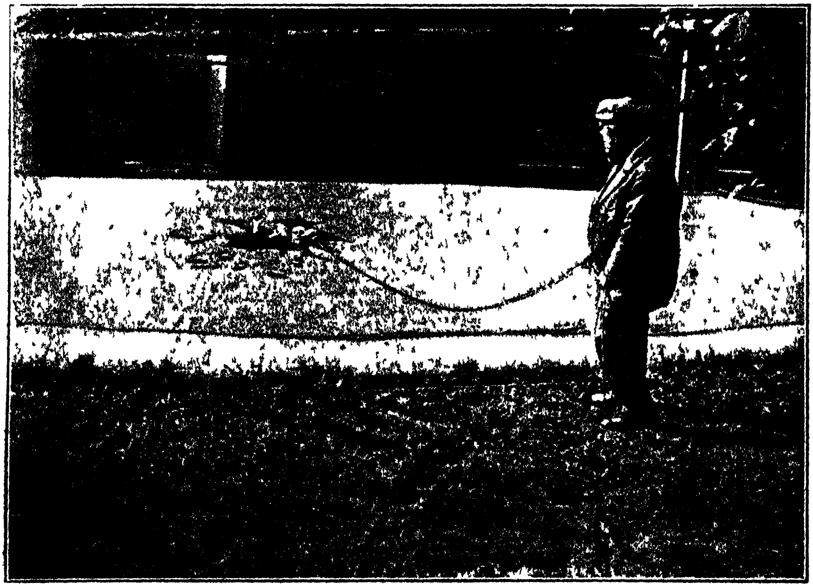


Fig. 12.

RUPTURE CONSTRICTED. Quiet position in bed, seat raised, knees bent. Clystors of 90° from one to two pints enemata, hip bath 99° of about half an hour's duration, during which hot water should be continually added to keep the bath temperature of 99°. Hot compresses, changed as soon as they begin to cool, may also be applied. Send immediately for a surgeon or doctor to replace the rupture. See also under "Ruptures" in Index.

SNAKE BITE. See Index.

Sprains. The injured limb to be elevated and cold compress applied to it. Derivative massage, stroking upwards, so that the flow of blood is distributed. Detergent and derivative soothing packs 77°. See also "Sprains" in Index.

Stings of Insects. If stung by bees, wasps, and other insects, wet the thumb-nail and press it firmly over the stretched skin of the injured spot till the sting or the poison is ejected. The sting is the first thing to be removed A local cooling application in the form of cold water compresses should be made, or curds, clay or ammonia may be put on on the place. In cases of poisoning by insects use also local steam baths, as well as steam box-baths and packs.

Mortification of Foot Caused by Tight Bandages.

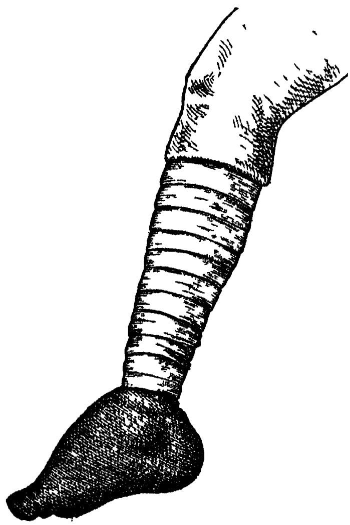


Fig. 13.

Sunstroke. See Index.

Suffocation through Breathing Noxious Gases. Remove at once into pure air and apply artificial respiration (see Index) and vigorous cool (72°) friction of the whole body. (See Index.)

Treatment of Wounds. The person assisting must first cleanse his hands, so as not to contaminate the wound. Bleeding may be staunched and pain relieved by hot water compresses—as hot as they can be borne. The water for the cleaning of the wounds should be pure and if possible have been boiled. The edges of gaping wounds should be brought close together, if necessary by means of plaster, or by sewing, so that the wound may heal properly. For further information see "Wounds."

Vomiting Blood. If the blood is dark in color it comes from the stomach. • Get rid of all tight clothing and put the patient in a horizontal position. Leg pack (79°) with hot-water bottles to the feet and calves. Cool compresses (68°—72°) on the stomach.

Wounds Caused by Pressure or by a Blow. Cool compresses, cool wet bandages, to be removed as often as is demanded by the heat of the injured place, also constant immersion in cold water. See also "Contusion".

Accidents Through Hanging, Drowning, Suffocation, Cold, Etc. First aids in the same and attempts at reanimation, see the same.

Accouchement, see "WOMEN, DISEASES OF".

Accumulation of Gas, see "FLATULENCY".

Acidity of the Stomach, see "HEARTBURN."

ACNE is an obstruction at the opening of sebaceous glands. These become a little distended in consequence, and form a tiny protuberance, black or grey at the point, and when squeezed discharge a tallowy substance in the shape of a thread.

Acne is found usually in young people, and persons who are not over cleanly, and appears mostly on the face, back and neck.

TREATMENT.—Attend carefully to cutaneous action, give two or three steambaths during the week, followed by full-pack and bath, or instead of this steambaths in bed. Wash and bathe frequently; apply full rubbings with wet towels. See: "PIMPLES". For Modes of Application, see Index.

ACUTE DISEASES are such as are inflammatory, feverish, and develop quickly. The longest duration of an acute disease is in most cases reckoned at four weeks, if this period be exceeded it is termed chronic. Every acute disease is an effort of the whole system to eject matter which it cannot assimilate. Nature herself is the physician; we need only watch for her hints, and with the aid of the simplest remedies second her endeavors to heal by lukewarm sponge baths, baths, packs, fresh air, non-stimulating diet, and by never opposing her. If we do this, every illness will assuredly be cured by nature alone.

Affection of the Head, Chronic, see "BAD HEALTH."

Affection of the Liver, Kidneys, Stomach and Bile, Chronic, see "BAD HEALTH."

Affusion, see Index.

Affusion, Full, see Index.

Affusion, How to Apply Without Aid, see Index.

Affusion, Upper, see Index.

Afterbirth, see "PLACENTA."

AFTER-TREATMENT in "Regenerative Treatment." See Index under the latter heading. In addition to the various modes of application mentioned there curative gymnastics should also be tried.

AGE OF THE NATURAL MAN.

Every human being receives at birth a certain amount of capital in the form of vital force. To judge from the law which apportions to mammalia about the five-fold span of time requisite for the perfect development of the skeleton, normal man—i. e., a human being—born of healthy parents, perfectly healthy himself, and spending his vital force properly and economically, may live, as a rule, from one hundred to one hundred and twenty years, and in exceptional cases may attain the age of one hundred and fifty, and even more. Most exact observations have proved that the horse, which requires five years before its frame is firmly set, lives to an age of five times five, or twenty-five to thirty years; the camel, requiring eight years, to an age of five times eight, or forty years; the dog, requiring two years, to twice five, or ten years; the elephant, requiring forty years, to an age of five times forty, or two hundred years. This is the rule. But exceptional horses have lived fifty years, and even longer. There is in the museum at Manchester the skull of a horse that lived more than sixty years. Alexander the Great dedicated his war elephant to the sun, in honor of a brave enemy whom he had conquered. This historic elephant, which he set at liberty, after attaching an inscription to its neck, was found alive three hundred and fifty years later.

As among the mammalia, so also among men we meet with individuals living to the age of one hundred to one hundred and twenty-five years; thus, for example, Democritus, the great naturalist, who died at the age of one hundred and nine years, without illness and as happy as he had lived. Rome saw two actresses aged respectively one hunderd and four and one hundred and twelve years. A French actress, who died in 1867, was one hundred and eleven years old. The Swedish veteran Mittelstedt, who, during his military career of sixty-seven years, had fought in seventeen battles and suffered weary captivity, paid his debt to nature at the age of one hundred and twelve years. In his one hundred and tenth year he wedded his third wife, and shortly before his death took a two hours' walk. Baron von Waldeck died a vigorous old man at the age of one hundred and six. An old French soldier passed away in the beginning of the fifties, who, being a bit of a wag, asked in his one hundred and twentieth year to be allowed to re-enlist in the army. The following cases may be mentioned where people have attained an exceptionally great age: The Englishman Effingham, who was a soldier for many years, and who earned his bread by hard work, died at the age of one hundred and forty-four, having hardly ever known illness. Thomas Parr lived to be one hundred and fifty-two years old. He was always in good health and happy, and lived on the simplest diet, till King Charles I. heard of him, sent for him, and in order

to do him honor had a splendid repast set before him. This caused his death, for the post-mortem showed that it was due to disturbed digestion. The Norwegian, Drakenberg, died at the age of one hundred and forty-six. He was for fifteen years a Turkish prisoner, and served as a galley slave. Nevertheless he retained sufficient vigor and cheerfulness to woo a young peasant girl when he was a hundred and thirty years old. Joseph Surrington lived longer still. He died at the ripe age of one hundred and sixty. His youngest child was nine, his eldest one one hundred and eight years old. The Hungarian Bowin died in 1750 at the ripe old age of one hundred and seventy-two years, leaving a widow one hundred and sixty-four and a son one hundred and fifteen years old. Another authentic instance may be mentioned of a Russian veteran who was born in 1623 and died in 1825, and who therefore lived two hundred and two years. If we ask how it is that some people live to so great an age, mostly in good health and always cheerful to the end, the answer almost invariably is that these people always lived very moderate, simple and natural lives; in other words, they never drew excessively on their capital in the shape of vital force, with which Dame Nature endowed them—never squandered it, as fashionable society, consciously or unconsciously, mostly does at present, but preserved it by frugality and acted like an economical housewife.

Prof. Dr. Buechner, Darmstadt, in a lecture on the duration of man's life, writes as follows: What is the greatest age that man is capable of reaching? It has been held that man cannot live much longer than one hundred years, but experience refutes this view. It has been proved by examples that he can live to be nearly two hundred years old. England especially furnishes us with several instances of this kind. A peasant, born in England in the fifteenth century, lived far into the seventeenth, and attained the age of one hundred and seventy-two years. As an old man of one hundred and twenty he is credited with still having performed heavy manual labor. He was accustomed to the most moderate and simple fare, and succumbed finally to an illness caused by partaking of too rich food on a festive occasion. He lies in Westminster Abbey. Another Englishman, born in 1500, lived to be one hundred and seventy years old. A Dane was born in 1624, and died in 1770 in his one hundred and forty-sixth year. His life was very checkered. He was one hundred and eleven years old when he first married; his wife was sixty years old, and after her death he wished to contract a marriage with a young girl of eighteen. There are other men who married repeatedly during their long lives; thus a Scotchman had nine and a Frenchman even ten wives. Hungary, too, can furnish an example of extraordinary longevity. An old man died at Temesvar in 1724 at the unprecedented age of one hundred and eighty-five. Even at the present time there are many people more than one hundred years old.

A man who served as an artilleryman under Frederick the Great is now alive in Bromberg, in the full enjoyment of his one hundred and eighteen years.

The majority of these long-lived persons are said to have been well and strong up to the very time of their death. It sounds strange to us that the hair and teeth of these aged people were renewed, and that the wrinkles in their skin disappeared. Hufeland cites two instances of this kind of regeneration. From the standpoint of physiology the thing is not at all impossible.

According to some authorities the mean age of man has advanced even further, and exceptional cases of a truly green old age have been cited in abundance. Many authentic records of antiquity exist which seem to show that we die as a rule very much earlier than people used to do. Even at the time of the Emperor Vespasian, after several centuries of moral corruption, there were living within a small area fifty-four people, aged over one hundred years; forty from one hundred and ten to one hundred and forty years, and two upwards of one hundred and fifty years old. (See Johannes v. Mueller's Universal History.)

It is not so very long ago that there were found among the Arabs—among those tribes who drink only water and milk—several people two hundred years old. Plenty of men are among them who, at the age of one hundred, are in their prime, and marry at that age with far greater justification than most young men with us. Even in Europe men have lived to the age of two hundred, and it may be assumed with certainty that these did not live beyond the normal age, but that all others did not reach it.

In the records of St. Leonard's Church, London, there may be seen an entry of a birth and death, which one might be tempted to doubt if it were not invested with full official authority—that of Thomas Carn, born January 28, 1588, died 1795. He lived, therefore, to the ripe old age of 207 years, and saw twelve sovereigns occupying the British throne. Three score and ten years is now-a-days a considerable age.

Most people who die of chronic diseases succumb between the ages of fifty and seventy years, and even earlier. And these fifty to seventy years which we live—is this life? It is a life of sickness, a chronic dying, lasting for seventy years before it is over. This state of sickliness which we call life and passable health, this miserable state which crawls with us to our death-rattle, accompanied by bottles of poison (medicine) which tortures us in the sick-room, begins with the moment of our birth into this world, when the midwife and nurses drink the health of the wretched new-born baby in something stronger than water. It is sad to think that in the sparsely populated, and therefore less corrupted, East of Europe better

health, greater bodily strength and longer life is to be found. In the wild parts of the interior of Russia chemists and doctors are far rarer than with us. In the spring of 1839 all the German journals gave quotations from the Russian bills of mortality, and were greatly astonished that people frequently lived there to be over a hundred years of age. A few years ago the returns showed that of 748,237 persons in forty-four dioceses, 2,091 died after reaching ages varying from a hundred to a hundred and forty years. Among the boons which the Emperor Nicholas granted to his subjects, one was the multiplication of medical hospitals, and there is no doubt that longevity in Russia will grow to be more rare, and will gradually approach that of Western Europe.

People of one hundred years of age and upwards are by no means rare in the rural population of the Herzegovina, and there are some villages in the mountain districts of the country in which it very rarely happens that an inhabitant dies before the age of eighty. In one of these villages, Dreznica, in the district of Mosta, there lives at present a peasant, Anton Turitsch by name, who has attained the extraordinary age of one hundred and thirty years. In spite of this he still works in his vineyard, and, being a Roman Catholic, is obliged to walk a distance of eight miles each way to attend church, which he does every Sunday. His eyesight is still very good, for he can distinguish any object at a distance of a hundred steps. His eyebrows are remarkable; they are so thick and bushy that they have to be cut regularly to prevent them from obstructing his vision. His memory is excellent, and he relates the varied experiences of his abnormally long life in a most interesting manner, and has not forgotten the most important events of the last hundred and thirty years, describing and connecting everything he relates most logically. He is said to take after his mother, who attained the age of one hundred and twenty, his father having died at the comparatively early age of ninety-two.

One Hundred and Thirty-five Years Old.—According to the Turkish newspaper "Sabah" a Turk named Mewlud Effendi died recently in Constantinople at the age of one hundred and thirty-five years.

A Russian Methuselah.—In October, 1895, the St. Petersburg journal "Listok" wrote: "On the 3d inst. Ivan Kusmin, a peasant, aged one hundred and thirty-eight, was admitted into the Obuchow Hospital in this city. He had been sent to the Jenisseiski District as a settler. The government has given him a passport as a pilgrim to every city in the empire. He by no means shows his great age, being hearty and intelligent, and speaking intelligibly and hearing well. He was born in the year 1757, and was, like his parents, a serf of Count Scheremetjew. He spent his childhood in a house of his master at Moscow, and was, he says, at the age

of eighty-five, banished to Siberia for ten years for refusing to serve the count any longer. But instead of spending ten years in that inhospitable region he lived there for fifty-three years. At the time of the emancipation of the serfs by the grandfather of the present emperor he had already obtained his freedom, and was employed in gold washing at the Taiga gold mines, where he lost his toes. In the year 1894 he got homesick, and the government gave him a pass for European Russia and a free pass on the railways. After spending but two days in Moscow, where he could find no relatives alive, he came on to St. Petersburg and rented a room here. Ivan Kusmin has never been married. His memory is so good that he clearly recollects the Pugatschew Rebellion, the annexation of the Crimea, Napoleon's invasion of Russia in 1812, and all other important events. His father also attained a very great age, having died in his hundred and forty-eighth year."

Peter Maffens mentions in his history of India a man named Numisde Cogua who died in 1566, aged three hundred and seventy years. His teeth, beard and hair grew four times. Bellour Maccraine lived for one hundred and ninety years in one house. In Russia a man lived to be two hundred and two years old. Don Juan Saveire de Lima died in 1730 at the age of one hundred and ninety-eight.

According to the Bible, Methuselah was the oldest man who ever lived. According to the division of time then in use he attained the age of nine hundred and sixty-nine years.

Advice to Mothers. See "MOTHERS, ADVICE TO."

Ague. See "MALARIA".

Air, its constituents, etc. See Index. To provide for its purity, see "VENTILATION." How to breathe properly, see "BREATHING EXERCISES."

AIR BATH FOR MEN IN THE BILZ SANATORIUM.

The great advantages which accrue from allowing the body to be fanned by the wind are daily meeting with wider recognition, and consequently every well-conducted sanatorium now has separate places for ladies and gentlemen—places which are of considerable extent and surrounded by high walls to screen them from observation. Visitors and patients, wearing only their bathing drawers, indulge as they please in gymnastics, jumping, singing and all kinds of exercises. Close by is a swimming bath where they frequently take a short dip, and then allow air

and sun to dry the moisture on their bodies. Such are the natural air-baths, which, unfortunately, but few have the opportunity of enjoying. Those who cannot do so should not fail to practice gymnastic exercises, etc., in summer, or, at any rate, once or twice a day for five or ten minutes without any clothes on, and with the window, and, if possible, the door wide open. In winter the room should be heated.

A simple primitive air bath, such as is described, is a great blessing to men and women, and is sure preventative against many an illness.

Air Bath for Gentlemen in the Bilz Sanatorium.



Fig. 14.

I would further strongly recommend everybody, and especially children, to sleep without any night-dress of any kind. One gets accustomed to it very soon, and the body is much warmer than when one goes to bed half undressed or in shirt and drawers. People already accustomed to look after their skin will soon find this a necessity.

AIR-CUSHION. To obviate bed-sores, or to heal them more speedily, the patient is put on an air cushion (Figs. 15 and 16) which is inflated with air and then closed by means of a screw. There is a round open space in

back with the finger, which should be oiled for this purpose every time it was pressed out. Immediately after the adoption of these measures the stool became easy, and in a month the prolapse was cured.

AORTA (great artery of the body) is the blood vessel which takes the light-red blood containing oxygen from the left ventricle of the heart into the blood vessels. Its branches are called arteries. See "BLOOD, CIRCULATION OF THE."

APHTHAE is a disease which covers the mucous membrane of the mouth with small, more or less closely attached caseous fungi or white vesicles. This disease appears principally in infants during the first weeks after birth (most frequently between the tenth and sixteenth day), but sometimes in adults who are in a week state of health.

It causes pain to children at the breast, and they, in consequence, are averse to taking the mother's milk.

CAUSES.—Uncleanliness, especially of the feeder and teat, disturbed digestion, pungent, heating food, taking cold, depressed condition of the suckling, mother or nurse, artificial feeding. and the like.

TREATMENT.—The greatest local cleanliness must be observed. Wash and wipe out the mouth with a soft, wet linen rag, dipped in lukewarm (81°) water, and squeezed out moderately. Rinse the mouth, and give fresh water to drink frequently. A spoonful of water must be given immediately after the child has had the mother's breast, or any other food. Nipple shields must be kept clean (but they must not lie in the water too long). In serious cases stimulating tepid throat-compresses (77°) and a daily warm (92°) bath are necessary. This is especially the case in adults, but the temperature must be 2°—4° lower. In general, cool, non-stimulating, easily digested food, fresh air and enemata in case of constipation. (For Modes of Application see Index.)

CURE OF A BAD CASE OF APHTHAE.

(By H. SPERLING, Natural Healer of Berlin.)

I will only mention one of the most serious cases of aphthæ during my nineteen years' experience.

The infant daughter of Mr. L., Melchior Strasse, Berlin, contracted aphthæ in spite of every attention paid to cutaneous action, so severely that not only the entire mouth but all the mucous membranes of the intestines as far as the anus were covered with them. In smell and form they were similar to diphtheria. My orders were strictly followed, which were baths (90°), the child to be wrapped while wet in a sheet and allowed

to steam. Previous to the bath a light bed-steambath, in the afternoon or oftener if necessary, abdominal-compresses, for a shorter or longer time, or renewed as required. Enemata (81°), removal of feather-beds; sleeping with window open; not allowing the child its mother's milk, cleansing the mouth very often, now and then a teaspoonful of (73°) water. In spite of all these measures it was a long time before the little one recovered and gained strength. For almost the whole of the first year the child was rather sickly at times, and not until the age of twelve months did it become really well again. Such a power of resistance can only be met with in a girl; a boy would have succumbed long before. The mother, carrying her child under her heart for nine months, had nourished it during that time probably with morbid blood, and had suckled it afterwards with her equally bad milk; for Mrs. L. had hitherto known nothing either of vegetarian diet or of a hygiene consonant with nature's canons. I have cured less severe cases of aphthæ in a few weeks.

Apoplectic Fit, see "APOPLEXY".

APOPLEXY. There are several kinds of apoplexy, viz.: of the brain, and of the lungs. The cause is always the rupture of a vein, tissue or vessel, resulting in extravasation of blood on the brain, lungs, etc.

Apoplexy may result in immediate death or in various paralyses, e. g., paralysis of one side, of the body, or of single limbs.

SYMPTOMS.—The first indications of cerebral paralysis are heaviness and giddiness in the head, headache, vertigo, shooting pains in the neck and limbs, drowsiness, loss of memory, noise in the ears, photopsy, slight convulsions, trembling, mental discomfort, also sickness and vomiting, visible decrease of the power of thinking, clumsiness or hasty movements.

Sometimes one set of symptoms and sometimes the other predominates before an attack, according to the character of the rupture of the blood vessels, e. g., whether through collection of water, engorgement of blood, through the blood vessels becoming morbid and liable to rupture, etc. The latter is usually the case when the patient is advanced in age, on which account paralytic fits occur most frequently after the age of 50. (Also the greater or lesser size of the blood-vessels prone to rupture makes a difference of symptoms.) The fit itself takes place suddenly, the patient falls to the ground unconscious either with a loud scream or mutely. The respiration is labored and accompanied by a rattling noise, the face is deathly pale or bluish-red and the breathing disturbed. If the extravasation of blood on the brain is considerable, or the most vital part of the brain is destroyed, immediate death results. However, consciousness sometimes returns, and the patient may, with the very best natural treatment, gradually recover even in severe cases. Unconsciousness and para-

lysis (or the latter only) often take place gradually, i. e., without apoplexy. The apoplectic fit may surprise its victim amid joyous scenes, all of a sudden and without any indications whatever, so that the strongest man in the prime of life may be dead the next moment. But in the great majority of cases the fit is characterized by the above named premonitors; all of them indicate approaching danger and justify the greatest anxiety.

CAUSES.—The walls of the vessels become liable to rupture in old age, and this is especially produced and accelerated by indulging in spirits, strong beer, wine, animal food, and other irritants.

Furthermore, by taking too little fresh air and water, whereby the walls of the vessels become brittle and chalky, and as a result of other deep-seated diseases. Men are more liable to this malady than women, perhaps in consequence of greater indulgence in the many stimulating, fermented beverages.

If elderly persons complain of vertigo, formication, weak memory and weak legs, the cause may be degeneration of the brain and its vessels; and if plethoric men with short neck, red face, are often affected with headache, vertigo and noise in the ears, they should, in both cases, guard against cerebral apoplexy, and adopt a vegetarian diet, neither eat nor drink too much, and abstain from violent movements and exertions; they must, above all, sleep with the window open, have as much fresh air as possible, and look to the action of their skin. Those who have had a fit of the kind before must be especially careful. Persons who take but little exercise and follow a sedentary calling, to avoid any trouble of this description should take a steam-bath once a week, followed by a wet pack and a lukewarm (86°) bath or douche-bath, or even bed steam-bath, in order to promote assimilation, especially in spring and autumn. And this precaution should be taken especially by plethoric as well as short necked and red faced people.

APOPLEXY, Pulmonary.—Blood extravasates in consequence of a rupture of the pulmonary tissues and larger arteries from the rents thus caused. If the blood empties into the cavity of the pleura, death always ensues.

The cause may be injuries, bursting of the enlarged aorta, etc.

TREATMENT.—The blood, which has extravasated, must be removed; take off at once all tight articles of clothing, next ensure perfect rest, and more or less frequently apply tepid (67°—73°) compresses or tepid affusions to the head. On no account allow the compresses to get very warm, but change them repeatedly, put warm compresses to the feet and follow with vigorous cool foot friction, or apply tepid (69°) stimulating

foot packs for two hours, with hot water bottles if the feet do not soon get warm. Then very careful (73°) full rubbing with a wet towel of the whole body, with the patient in a quiet position, if necessary let him lie absolutely at rest and apply only compresses and detergent methods, etc. If the face is flushed and the head hot, the above mentioned 67°—73° compresses round the head must be continued and must be changed when hot; the head must lie high, give three or four small enemata daily for absorption, see that there is good air in the room, and instill now and then a few spoonfuls of fresh water into the patient. Above all, an experienced Natural Healer should be consulted.

In other respects vegetarian diet, plenty of fresh air, sleeping with the window open, movement of the patient as much as is compatible with his condition. Finally, strengthening treatment, combined with the best attention to cutaneous action, or, as the case may be, regenerative treatment. (For Modes of Application see Index.) See also under "PARALYSIS."

CURE OF APOPLEXY.

(From Dr. MUNDE's book: "Natural Therapeutics and Hydrotherapeutics."

During my management at Elgersburg, my mother, aged 73, had a sudden stroke of apoplexy. She was occupied with some needlework and suddenly fell to the ground unconscious, injuring her arm and face. I had her at once carried into a cool, partial bath, and there well rubbed with head affusions of cold water. We then put her to bed and covered her head with a cold compress, and a female attendant, relieved in turn by a second one, vigorously rubbed her arms and legs. The bath was repeated after the lapse of some hours, and continued twice a day. In a fortnight's time she was completely restored to health, and lived for thirteen years afterwards. Whenever she noticed a determination of blood to the head, she at once had recourse to a cold compress and a detergent foot-bath. I was as successful in the case of an elderly gentleman of some fifty-five to sixty years, a Count Della Torre, to whom I was called in soon after the stroke. In six weeks I discharged him as completely cured.

CURE OF APOPLEXY COMBINED WITH CEREBRAL AND GASTRIC COMPLICATIONS.

(Taken from the Journal "Hygiene and Natural Therapeutics.")

Professor *Ferdinand Pusch*, of Sorau, had frequented various watering places (Johannisbad, etc.), and in addition to other ailments, had an apoplectic fit which lamed his right side, and left him with an almost

useless arm and leg. His power of thinking was greatly diminished, and, whenever he took up a pen to write, a strange excitement came over him, his hand shook and trembled, and all idea of writing had to be abandoned. At times his eyelids were closed and his nervous pains were excessive; his stomach was so influenced by his brain as to refuse every kind of food. When he had arrived at the conviction that medicine could not help him, he requested his intimate friend, Dr. *Fraenkel*, in D., to take him to Graefenberg or to Kunzendorf, of which he had heard. He arrived there on December 18, 1885, in a condition that may be imagined. His feeling of misgiving when told that water alone was to cure all his ailments may be excused. In a few weeks, however, partial baths, compresses, air and diet so far restored him that, with the aid of a stick, he could take walks. The pains soon disappeared, the lame leg got completely well (at first the leg was sky-blue and he had to drag it after him); his arm gained strength, his power of thinking returned, but still he could not write. His diet consisted of ground wheat, rice, eggs beaten up with sugar, fruit, vegetables, warm and sour milk with bread. The stomach would at first take food only in drops; any larger quantity irritated the brain and was rejected. The patient gained over thirty pounds in weight during his stay. He was such a favorite at K., that he was induced to stay until March 28, 1887. During the summer months he had charge of Castle Kunzendorf, and made excursions on foot upwards of twenty miles in a day. Nobody would imagine from merely looking at him, that he was once so ill, and the doctor, who had advised him not to forget to take a coffin with him to Kunzendorf, was astonished when he went to see him at the effect which water had wrought in him.

CURE OF APOPLEXY.

(By Dr. Zenker, Alexanderstrasse, Leipzic.)

A post official came to us, suffering from stiffness in the left arm and leg, so that it was extremely difficult for him to walk. The stage of secondary contraction had set in, where the medical school is at the end of its pharmacopœia, and usually gives up all attempts to cure. In this case, too, the Natural Method of Healing triumphed. After a certainly severe treatment, which, however, only lasted three weeks, the patient was so far relieved as to be able to take long walks. In treating him I relied chiefly on massage, which was performed twice daily. Steam-packs and detergent hip-baths were applied with the best results.

Apoplexy of the Lungs, see "Apoplexy, Pulmonary".

APPETITE, Want of, is usually met with in fever patients, in cases of acute gastric catarrh and many other diseases; as well as in persons greatly addicted to drinking, smoking and opium-eating.

TREATMENT.—Removal of the causes.

In light cases probably caused by disordered stomach, simply wait till appetite returns; further see "CATARRH OF THE STOMACH" (acute), "STOMACH DISORDERED STOMACH WEAK," etc.

Appliances Used in the Natural Method of Healing, see Index.

Application of Massage in Midwifery, see "WOMEN, DISEASES OF".

Arm Steam-baths and Hand Steam-baths, see Index.

Arm Broken, see "BONES, FRACTURED, ARMSLING".

Arm and Hand Steam-baths, see Index.

ARMSLING, or temporary bandage for a fracture of the upper or fore-arm.

Splints of flat pieces of wood padded with leaves, grass, straw, etc., and secured by pieces of cloth or linen will suffice for a temporary bandage in case of a fracture of the upper arm. In case of a fracture of the fore-arm a sling made out of a folded piece of cloth or a necktie of a convenient length should be used.

The two ends are here passed over the chest and tied together on the neck or shoulder. (Fig. 17.)

When the arm is permanently set by a surgeon, a different sort of padding and smooth splints will commonly be used, and the whole bandage somewhat more scientifically adjusted.



Fig. 17.

The Right Arm shows the Bandaging of a Fracture of the Upper Arm,—on the Left Arm is shown a Sling for a Fracture of the Forearm.

If a three-cornered piece of cloth be used for a fracture of the fore-arm, the two long ends are passed over the chest to the right and left, and fastened together on the neck or shoulder by a knot or a safety pin. The third end which projects beyond the elbow is then drawn up behind the elbow and fastened to the sides of the sling by means of safety pins, etc., toprevent the possibility of the arm slipping out of the sling.

If a four-cornered cloth be used, proceed as follows: Pass one side of the cloth under the shoulder of the fractured arm, and tie both ends together in a knot over the uninjured shoulder; now carry the free end round and over the fractured fore-arm, passing one corner over the left, and the other over the right shoulder and tying them together over the neck or uninjured shoulder.

See also "BONES, FRACTURE OF."

ARSENIC, a virulent poison.

Arsenic Poisoning, see "POISONING."

ARTERIES, Calcareous Degeneration of. Calcareous degeneration of the arteries of the body is often observable in old people.

CAUSES.—Gouty affections, syphilitic diseases, indulgence in alcoholic beverages, mineral medicines. Drinking calcareous water is also said to be often the cause of this atheromatose process, as numerous instances in the Jura mountains testify. How ignorant we yet are as to the origin of this degeneration is proved by the fact that, whilst some observers look upon it as the outcome of old age, Dr. Monin considers it as the result of a vegetarian mode of life, an opinion not by any means corroborated up to this day.

SYMPTOMS.—The connective tissue cells of the inner arterial coats swell and separate; the filaments of the tissues grow thicker; lime salts are deposited in the cells, causing calcification or ossification. The smaller tissues in consequence get contracted or relaxed, and appear in serpentine form. This is the cause of the arteries losing the power of resisting the pressure of the blood, and tending to bulge out in some places (see "VARICOSE VEINS, ANEURISM"), whilst the pressure of the blood is augmented by the contraction of the vessels, the former therefore becoming stagnant in the left ventricle of the heart and causing enlargements of the same.

TREATMENT.—When the complaint is in its initial stages, and with comparatively young people, improvement will be obtained by generally conforming to a natural mode of life; above all by breathing gymnastics, carried out with regularity and perseverance in pure air.

Regulating the circulation of the blood by exercise in the form of Swedish curative gymnastics.

Massage of the whole body. Application of steam, according to the patient's individual constitution. Daily half-baths (27°) from one to two minutes; diet of milk, and products of milk, such as sour, thick milk. On the other hand, all spirituous and malt liquors, spices, and salt are to be avoided.

Arteries, see "Blood, Circulation of."

Arteries and Veins, see "Circulation of the blood and hemorrhage".

Arteries, Dilatation of. See "Arteries, Enlargement of."

ARTERIES, Enlargement of. The walls of the arterial vessels are expanded in consequence of the pressure of the blood against them, that is, when they are in a morbid, enfeebled condition.

Symptoms.—This enlargement occurs most generally in the great aorta, in its interior walls. According to the size of the inflammatory swelling, which varies from the size of a nut to that of a child's head, a disorder and a feeling of pressure in the chest appears. On tapping, a dull sound is emitted, a peculiar noise will be heard if the ear be placed to it.

The causes of this disease are the effects of wounds, paralysis of the nerves, etc.

Treatment.—As much rest as possible; avoid therefore all bodily and mental excitement, as well as violent exertion.

Continual stimulating foot and leg pack, especially at night, besides soothing compresses on the chest. The latter to be changed on getting warm; light massage of the same part to be performed at the same time.

In the next place strengthening treatment; also an occasional foot and hand steam-bath of an hour's duration is recommended, and a soothing abdominal pack in the meantime. Single symptoms and their causes must be treated as they appear. (For Modes of Application see Index.)

Arteries, Tying up of, see Index.

Artery, see "Blood, Circulation of."

Articular Rheumatism, see "Rheumatism."

Artificial Respiration, see "Breathing, Artificial." We would also mention here that it is sometimes of advantage to blow air into the lungs of the patient through his mouth.

ASCARIDES are found mainly in children and most abundantly in the rectum. They are from a twelfth to a third of an inch in length, and often cause little children to wet their beds. The symptoms are violent itching and irritation at the anus which generally gets worse at night. They are also at times present in the excrement.

Treatment.—Moderate and vegetarian diet, especially whole-meal bread and raw or cooked fruit; tepid enemata (73°). Abdominal compress

at night and two three-quarter packs weekly. In giving the enemata insert the syringe as far up the rectum as possible. See also "WORMS." (For Modes of Application see Index.)

ASCITES. In this disease, which is not an independent but a secondary one, a perfectly clear fluid is found in the peritoneal sac, collecting there in smaller or larger quantities according to the extent of the affection. The most varied previous diseases may have laid the foundation for this complaint.

SYMPTOMS.—A feeling of repletion, difficulty of breathing, sensation of the skin being stretched, and flapping motion of the abdominal parts, which, on being sounded, emit a hollow sound.

CAUSES.—The condition of the blood is changed and deteriorated; and its reflux to the heart is impeded from some cause or other, e. g., large tumors in the abdominal cavity, diseased liver, etc., for which reason stagnation arises in the vessels of the peritoneum. This disease may also result in chronic peritonitis.

TREATMENT.—Give half steam-bath daily lasting from twenty minutes to half an hour followed by (88°) bath with affusion of the abdomen; or give dry pack, with wet abdominal compress for three-quarters of an hour, and then the bath as above. Later on, luke-warm abdominal compresses (77°) of from half an hour to an hour's duration with calfpacks for two or three hours at a time. In general the treatment must be adapted to the original disease.

The massage treatment of this disease is carried out in the following manner. Stroke the back, especially the region of the kidneys, in the direction of the ureter (see Figure under "CHEST AND ABDOMEN, ORGANS OF THE".) Massage may also be applied to the abdomen, and enemata be used. Fresh air, non-stimulating diet are essential.

Ascites is generally the result of deep-seated diseases of the heart or lungs, and these must be dealt with first. For Modes of Application, see Index.

A LETTER OF THANKS.

About two years ago I suffered from ascites, and some medical practitioners, six in number, could not restore me to health. By the advice of some friends I applied, after an ineffectual treatment of nineteen months, to the Rev. Mr. *Koenig* of this city (No. 31, Melchiorstrasse), and, after a four months' treatment, I was so far restored as to be able to leave my bed, and in two more months could resume my calling. Deeply indebted to the Rev. Mr. *Koenig*, to whom after the Almighty I owe my recovery, I wish to state publicly that I was saved and radically cured by

the modified *Schrodt-Priessnitz* method and that, but for this treatment, I should not be alive now, for my condition at the time clearly pointed to a fatal termination.

Berlin, No. 9, Michael-Kirchplatz. *L. B. Voigt.*

ASSIMILATION is the act of converting food into substance of the body. Thus regeneration or growth and decay are continually going on in our system. It is computed that an adult person becomes an entirely new being every six or seven years (children in a shorter period). This assimilation or change of matter causes the old and wasted matter to evaporate, and new substance to be formed out of food, air, water, heat, light, etc. This process is a result of the continual combustion which is supported by the oxygen we breathe. The chief factors of assimilation are, therefore, free circulation of the blood, respiration, digestion, and excretion. If any of these processes be impeded for any length of time disease is the result. To promote and maintain free assimilation, attention must be paid to cutaneous action, which may be assisted by a daily sponge-bath of the whole body or bath, occasional steam-baths or steam-baths in bed. The bowels must be kept open, if necessary, by means of enemata. Fresh air, out-door exercise, and curative gymnastics are necessary, and more especially for persons who lead a sedentary life.

ASTHMA (spasms of the chest), is a very peculiar complaint and may result from various causes. When of a malignant and violent character it almost produces the impression that the sufferer is going to choke. The morbid symptom often betokens a convulsive state of the fine branches of the wind-pipe, or, to speak more correctly, of the muscular fibres of this organ.

Persons suffering from asthma may, if proper attention be paid to diet, quite well live to a ripe old age, and, moreover, be comparatively free from attacks for longer or shorter periods. Cases in which persons afflicted with asthma have even attained a very considerable age are by no means rare.

A fit of asthma may last from ten to twenty minutes or more, and sometimes even for several hours with short interruptions. It may end suddenly or gradually by yawning or eructation; the cough becomes loose and a viscid phlegm is expectorated. Intervals lasting as long as two years may intervene before another attack occurs.

Little children when sleeping, after a fit of crying, are often troubled with difficulty of breathing, which may culminate in suffocation, the little ones becoming black in the face until able to breathe again. It is true they very soon recover, but they are only too subject to a recur-

rence of such attacks, and strict attention to the Natural Method of Healing is advisable.

Causes.—Most cases of asthma have their real origin in a predisposition of the nervous system to disease which can undoubtedly be inherited, since even the very youngest children are sometimes subject to it. The immediate causes of an attack are, however, of various kinds, e. g., great mental excitement and slight changes in external conditions of life, sleeping in a dark room or the effect of aromatic substances. But the origin of many cases is not nervous but is to be traced to specific diseases and chiefly to chronic diseases of the nose and abdomen, e. g., a chronic tumor in the nose (polypus); in women to diseases of sexual organs, and in children to worms in the bowels, etc., etc. Mucous obstruction in the lungs, enlargement of the liver or spleen, sudden suppression of secretion of the skin may also be considered as causes of asthma.

Treatment.—Heat is the most efficacious remedy as being a cramp-stilling sedative and relaxing agent. A steam-bath in bed from half an hour to fifty minutes, or a half steam-bath as far as the hips for twenty minutes, according to the condition of the patient, should be followed by a sponge-bath of the whole body (77°).

After the application of steam, either a three-quarter pack (77°) of from one to two hours to be given daily, or a bath (90°) for ten minutes, in which back and extremities are to be energetically rubbed. All depends, however, whether and to what extent the patient can bear it.

Sun-baths are also highly recommended. In the night, abdominal and calf-pack (77°). The former should be removed after two or three hours, if the patient wakes of his own accord at the time. In the morning repeat sponge-baths (77°). If the abdominal packs are not troublesome to the patient, they too may remain on the whole night.

To shorten an attack of asthma, remove all clothing from the upper part of the patient's body and apply hot compresses to chest and abdomen, and change repeatedly. A purging enema will prove beneficial, and if the stomach be distended or flatulent give a few cups of fennel and aniseed tea (half and half). If the feet are cold during the attack, warming them by means of hot foot-bath, rubbing, hot-water bottles, etc., will afford great relief. All cold applications must be strictly avoided during an attack of asthma.

Another way of shortening the attack is to place hands and feet in hot water and put hot compresses on the chest-bone. Should this not prove efficacious, alternate applications of hot and lukewarm water may be tried, e. g., the hands and feet are kept for five minutes in hot water (100° to 105°) and immediately afterwards put for half a minute into lukewarm water (65°). This operation is repeated four or five times.

If one of the above mentioned diseases proves to be the cause of the asthma, this disease must of course be treated to avoid an otherwise unavoidable recurrence of the attack. Moreover strictly non-stimulating diet, living in the mildest, purest possible air, plenty of out-door exercise, but avoidance of all over-exertion and, in general, a strengthening treatment. Smoking and frequenting places where there is much smoke or steam are to be avoided.

MASSAGE TREATMENT.—Begin with massage of the back, ribs, and spine, as detailed at the beginning of Strengthening Treatment, combined, however, with careful slapping and tapping of the back. After this, chest and stomach to be treated as for inflammation of the lungs. It is also beneficial to roll the skin along the back in every direction, at the same time tapping the back and chest with moderate force. To roll the skin the directions are as follows:—Take hold of a part of the skin between finger and thumb, pinch it, and while pinching move it forward. This treatment is applied during a single attack for the purpose of alleviation. After the attack arms and legs may be stroked and kneaded, the former downwards, the latter upwards. Attention must also be paid to regular breathing gymnastics.

If we wish by means of gymnastics to increase the contracting power of the muscles of the breathing organs, we must take into consideration the constitution and individuality of the patient as well as the reciprocal relation that exists between breathing and other organic action, more especially circulation of the blood.

On this account we are strongly against irregular and indiscriminate gymnastic exercises particularly on the horizontal and parallel bars, etc., and confine ourselves to a treatment less calculated to cause rapid breathing.

Since asthma is only a symptom, any further treatment by massage must be adapted to the original disease, it will, as a rule, coincide with that indicated under Strengthening Treatment. *Kneipp* professes to treat asthma successfully as follows: Knee jet twice a day for two days, afterwards a short wrap, the cloth being dipped into hot water, every morning for an hour and a half. Every afternoon a sixfold cloth dipped into water and laid upon chest and abdomen and wrapped round with a blanket. This is repeated for a week, then an upper and knee jet daily.

ASTHMA CURED IN THE BILZ SANATORIUM DRESDEN-RADEBEUL.

C. R., of Görlitz, gardener, aged 59, visited my establishment on the 21st of April, 1896. For years he had suffered from asthma of a most violate and obstinate kind. He tried every means to get rid of it, but to

no purpose. Medicines of all kinds, course of treatment at Ems, etc., asthma apparatus, and every conceivable household remedy had proved utterly unavailable. He had had recourse to the most famous physicians, some of whom had indeed succeeded in effecting some temporary alleviation. The improvement had, however, been but short-lived, and, as the body soon got used to the drugs, his condition was in a short time as bad as it had ever been, and, in fact, became worse from year to year.

One doctor considered the lungs to be the primary cause, another the heart; others again described the case as one of a nervous nature, in fact, the opinions were most varied and conflicting. To quote his own words, "my sufferings during the winter time, especially in gloomy and rainy weather, arè indescribable. For many successive nights I could not sleep at all, through the violence of the attacks, but was compelled to spend the whole time until daylight in an armchair, and was often in danger of suffocation. Even dropsical swellings of the calves set in. In spite of the tonic diet prescribed by the doctor (wine and plenty of meat), the body became more and more emaciated through suffering, and the stomach entirely destroyed by the various drugs. Irregular stools, palpitation of the heart, nervous depression, irritability, cold feet, cold hands, stress of blood to the heart, and racking fits of coughing, after each one of which a viscid, white foamy phlegm was discharged. My attention was directed to the Natural Method of Healing and to Mr. Bilz' book by the lecture given under the auspices of the Society for its propagation, and I experienced considerable relief from the hot compresses therein recommended, whereas the cold compresses prescribed by my physician had only aggravated my condition. As a course of treatment was not very feasible at home, on account of lack of help I determined to become a patient of the Sanatorium."

The examination disclosed slight dilatation of the heart and of the lung cells, mucous obstruction of the smaller vesicles of the lungs and bronchial tubes, chronic catarrh of the stomach and of the bowels.

In cases of such a serious nature and of such long standing, especially when the patient has reached a comparatively advanced age, drastic measures are not liable to be attended with success. We had to proceed slowly and to treat the whole body. Diet first claimed our attention. We prescribed the so-called non-stimulting normal diet, consisting of lean meat, plenty of fruit and vegetables, but no irritating spices or sauces, and no alcohol in any form; moreover sleeping in a well-ventilated room and taking plenty of out-door exercise, when the weather was mild and the air good. On Mondays and Fridays in the morning a box steam-bath (115°), lasting about ten minutes, followed by a full bath (88°), in order

to promote the external activity of the skin and nerves. In the afternoon of these days a hip-bath (81°) for ten minutes and a foot-bath (89°) intended to strengthen the stomach and bowels, and divert the stress of blood. On Tuesdays and Thursdays head steambath and jet, which application had a particularly alleviating effect on the racking cough, and caused a great deal of phlegm to be expectorated. On Wednesdays and Saturdays in the forenoon, foot steam-bath of fifteen minutes' duration, followed by knee-jet; and every afternoon massage of the chest, back, and body combined with curative gymnastics. To promote the activity of the stomach and bowels, as well as a regular circulation of the blood, an abdominal compress was put on every evening together with packs (77°) on the calves and left until the morning. Within a few days, after the prescribed diet had been adhered to, the bowels became regularly open, the phlegm in the lungs and stomach was soon discharged with ease, and, whereas the patient had formerly been unable to obtain any sleep for nights together, the abdominal compress and calf packs proved the best of sleeping draughts and far more efficacious than all the doctors put together .

A few violent fits of coughing occurred during his stay, but these were stopped in a few hours by means of hot compresses on the chest and back, enemata (95°), a pint at a time, and leg packs. Such attacks had, when the patient was at home, lasted the whole night through. The patient's condition improved beyond all expectation, and so rapidly, that after a month's treatment more vigorous measures could be adopted. Accordingly a steam-bath in bed was given three times a week, followed by full bath (77°). On the other days alternate upper and thigh jets preceded by head or foot steam-baths together with daily massage and curative gymnastics. At the same time a course of the so-called *Oertel* treatment was prescribed, consisting of daily methodical hill-climbing in the Sanatorium grounds, and plenty of out-door exercise, the result of which was that in a couple of months he put on over ten pounds, and left the Sanatorium in the best of spirits and with many expressions of gratitude. Lungs and stomach were freed from the viscid phlegm, the racking cough had entirely disappeared, and stomach and bowels were in a normal condition. The patient who had come to us doubting and incredulous, and whose friends and acquaintances had done their best to dissuade him from trying water quackery, as they termed it, had come to the conclusion that there was but one way of healing that really heals, viz., the Natural Method of Healing, and promised to live according to the teachings of this simple method.

ASTHMA CURED BY PROF. TRALL.

W. Campbell, of Waverly, Ill., 45 years old, was declared by the doctors to be afflicted with consumption, and alarmed in consequence he hurried to New York. On carefully examining him, I recognized his case as one of asthma, such as I had frequently seen, caused by aggravated congestion of the liver. His cough was extremely violent, mucous purulent discharges were very frequent, breathing was always difficult, and night sweats continual. After being treated by the Natural Method for six weeks, every symptom of disease disappeared and he returned home perfectly cured.

ASTHMA, WITH INFLAMMATION OF THE LUNGS.

Dr. Corvet, fifty-two years old, homœopathic physician of New York, had for twenty years been afflicted with chronic asthma. A cold, which he had contracted, brought on an unusually severe attack simultaneously with inflammation of the lungs, and this the doctors diagnosed as typhoidal pneumonia. His cough was incessant, expectoration difficult, breathing very troublesome, and in spite of large doses of opium he was unable to get any rest whatever. In this condition he was brought to my institution. In a week's time he was not only entirely cured of the inflammation, but more completely relieved of his asthma than he had been for many years, and was able to resume his professional duties.

ASTHMA CURED.

(By Otto Wagner, manager of the Bilz Sanatorium, Radebeul-Dresden.)

Mrs. *Mende,* of Leisnig, aged 74, consulted me on January 1st, 1895. She complained that she had suffered from asthma for five years, and that, while she experienced but little inconvenience in warm weather, her sufferings were extremely severe when the weather was cold and damp, and more particularly in winter time. In spite of drugs of all kinds she had got worse from year to year, and the attacks had of late been so violent every night that she had had no sleep for a long time and was afraid her end was near. She looked strong and healthy, and indeed felt perfectly well when free from attacks, except that she had difficulty in passing urine, which was sometimes retained for days. On examination, the lungs were found to be healthy, the heart slightly degenerated, and the region of the kidneys and bladder sensitive to pressure. I prescribed hip-bath daily (77°) for five minutes with foot bath; for the night, abdominal compress and wet stockings (77°) to promote the function of the kidneys, and massage of the whole body three times a week. Alleviation was produced in a short time, the condition of the patient became grad-

ually better, and on March 2d she told me that, in spite of the raw air, she felt extremely well, passed her urine regularly without difficulty, and slept well. So that in eight weeks the Natural Method of Healing, properly and sensibly applied, had effected what medicine had been unable to do in the course of many years.

ASTHMA CURED.

(From THEODOR HAHN'S Book: "The Paradise of Health".)

I lived like the rest of mankind for sixty-three years, during the last thirty of which I was constantly tormented with asthma to such a degree that I finally lost my strength altogether, and could hardly stand upright or walk more than a few steps at a time. Last September, I had another attack and sent to town for Dr. *Deering,* who came to see me and stayed during the night to superintend my first treatment. Next day I felt better, in a few days quite well again. Being, however, afraid of another attack, I consulted him. He advised me to live a more natural life, and to leave off wine and coffee, both of which I was in the habit of taking. At the time I thought this would be impossible, but growing weaker again and my breathing becoming very troublesome, I saw that I should have to do something and made up my mind to follow Dr. *Deering's* instructions at all costs; gave up wine, coffee, fine flour, meat, salt, and all kinds of spice and fat. My neighbors thought I should probably continue this for a few days, and then, after getting worse, return to my old way of living, but I told them that I was compelled to try something, and that I was not responsible for my actions to anybody but myself. I have tried it now for seven months, and am more than satisfied. I am fully convinced that it is the only true way of living. My health and strength have continually increased, and I can work again and assist on the farm. As to cold, which I formerly took very easily, I have been quite free from it. I can stand any inclemency of weather, my breathing is easy, and I feel better than I have felt for many years.

I take two meals a day. My food consists of coarse wheat or rye-meal bread, fruit and vegetables, and, what seems strange to me, I have not once been really thirsty for the last four months, and I look forward to my health being in future as good as anybody's. Wishing you and every Natural Healer all success, I remain,

Yours sincerely,

A. F. Botenfuss,

Bunkerhill, Macoupin Co., Illinois, North America.

ASTHMA IN CHILDREN consists in the complete or partial closure of the glottis, effected by an inordinate stimulation of the motor fibres of the small nerves terminating in the larynx.

Causes. Spasm of the glottis, arising from inflammatory irritation of the laryngeal membrane, e. g., in croup, laryngeal catarrh, etc., from screaming violently, emotion or fright. Notwithstanding these accidental causes, this asthma is never met with in healthy children. An inherited or acquired taint (the latter through the nature of the nourishment with which the child is brought up), by morbid matter which is the true cause of all disease, must have preceded. Experience confirms our teaching that such children as have been weakened by lingering diseases, or are suffering from scrofula or hydrocephalus, etc., are generally attacked by spasm of the glottis.

Treatment.—Splash the face with cold water; apply a steam compress to the laryngeal region; the child should lie in a lateral position, with head bent forward; cool (60°) detergent enemata (contents, two large spoonfuls). Give fresh water in small draughts, vigorous friction to hands and feet. Further treatment must be in accordance with the patient's condition.

Asparagus, see "Diet."

Athletic Structure of Chest.

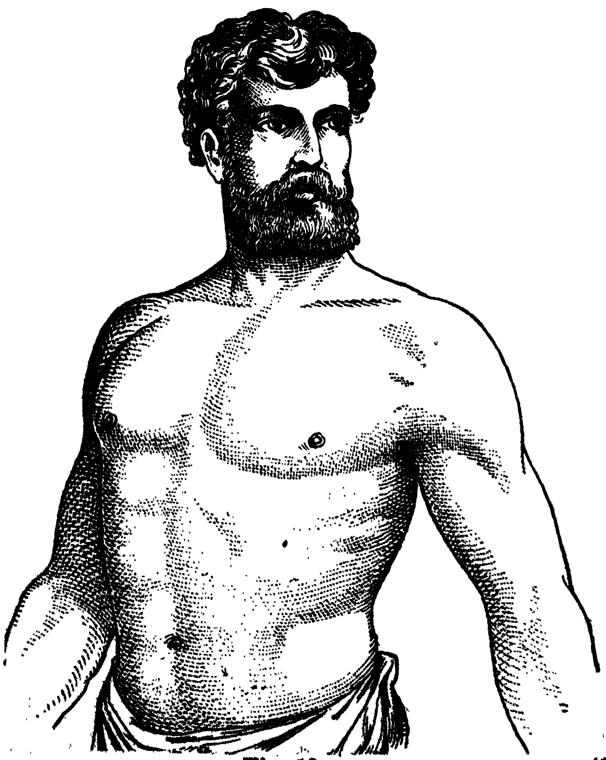


Fig. 18.

ATHLETIC (strong) structure, and consumptive structure, of the thorax.

For description see "CONSUMPTION OF THE LUNGS."

ATRESIA of the rectum with newborn infants. Must be operated upon the very first day after birth, or death will ensue.

Atrophy of the female mammary glands, see "DISEASES OF WOMEN."

Attempts at re-animation, see "ARTIFICIAL BREATHING."

Ausculation, see "METHODS OF EXAMINATION."

Consumptive Structure of Chest.

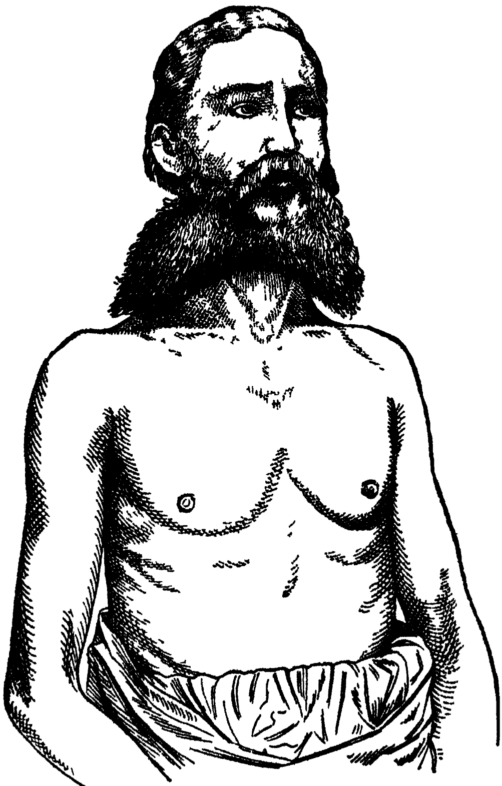


Fig. 19.

Axioms, having reference to chapter entitled "Diseases, How to avoid."

Axioms, which have reference to the healing of diseases of all kinds. See Index.

B.

BACKACHE, is frequently caused by hemorrhoids, rheumatism, and other diseases, e. g., affections of the uterus, anæmia, etc.

Rheumatic and hemmorhoidal pains in the back are often mistaken one for the other. The following are the distinctive features. With hemorrhoidal pains in the back, constipation and great heat are connected, but not with rheumatic pains. The former cease altogether with the patient's quiet position in bed, but not so the latter. With rheumatic pain the sufferer cannot stand upright without great effort, and prefers a stooping posture, which is not the case if the pains are hemorrhoidal, etc.

By neglecting the pain and allowing it to run its course, incurable curvatures of the body are not infrequently caused.

TREATMENT.—Must primarily, of course, be such as to cure the original disease, and remove its causes.

Then a steam-bath should be taken daily, with Kneipp douche after it, or steam-bath in bed, combined with vigorous (73°) rubbing with a wet towel of the whole body, and slapping and stroking (massage) of the back. For rheumatic pains, soothing trunk packs at night, which must be changed when the pains increase. Enemata, if the bowels are constipated. Fresh air is essential.

Another treatment. A tepid (73°) wet rubbing of the whole body with bare hands in the morning; shortly after, a soothing lukewarm (77°—86°) partial, or three-quarter pack, reaching just below the calves. The pack to be changed when the patient gets quite warm in it, the wet sheet to be doubled; enemata, etc., as before. Warm, or, as the case may require, hot compresses and baths will relieve the pain. Massage treatment here consists in rubbing and stroking the back. For Modes of Application, see Index; see also "BACK, PAINS IN THE," etc.

BACK, PAINS IN THE, result from various diseases and may be the first symptoms of other ones, e. g. diseases of the uterus, spinal cord, kidneys and hæmorrhoidal complaints. In lumbago the pains are chiefly in the loins and small of the back, as also in small-pox, yellow fever and in labor particularly.

TREATMENT.—Removal of the cause and absolute rest in a comfortable posture in bed. Soothing, combined with derivative or detergent treatment should be applied, and a lukewarm enema should be given. The following will also be found suitable: foot or half steam-baths followed by a bath (88°) combined with gentle friction and stroking of the affected parts, also one or two lukewarm (82° to 86°) hip baths daily, for lumbago, full steam-bath or steam-bath in bed succeeded by bath or douche and slapping massage on the affected parts. Local steam compresses, fol-

lowed by cool sponge bath and massage of the part affected is beneficial in lumbago.

Pains in the back during labor can be reduced by applying compresses to the painful places, also by stroking and rubbing. See also "BACKACHE". For Modes of Application see Index.

Bacilli, see "BACTERIA".

Bacteria of the Oral Cavity and Teeth.



Fig. 20.

Pus Bacilli.

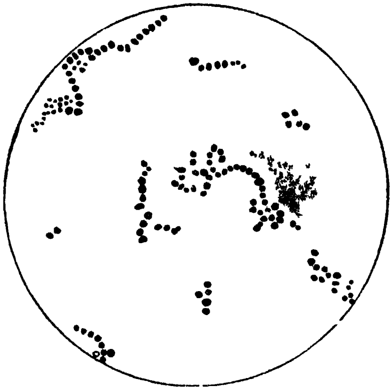


Fig. 21.

BACTERIA or Schizomycetes live singly or together in cells, or are held together in clusters by gelatine formed of their cellular membrane; they grow lengthways and split in the centre, hence their name.

Gonococci.



Fig. 22.

Splenetic Bacilli.

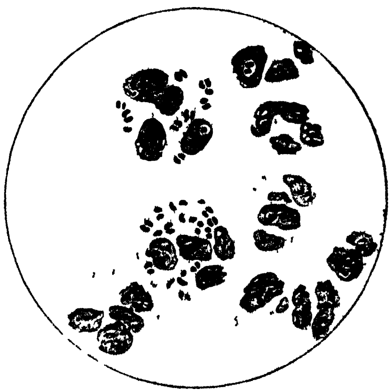


Fig. 23.

The schizomycetes are the smallest living organisms in existence. Magnified 2,000 times, they then only appear like a dot in this book. A

milliard (1,000,000,000) of these bacteria occupy no more space than a pin head. There are spherical and oval (or cocci, micrococces), rod-shaped or bacilli, and screw-shaped or spirillæ. In our opinion they are organisms created in the body. The so-called modern science explains them as originators of diseases, and asserts that one of these infinitely small creatures must have first got into the system to compass its destruction.

Taking the standpoint of the simple and popular system of treating disease, we look upon these bacteria as everywhere existent, and as the product only of disease, and even question their power to affect a healthy person. Where there exists no favorable feeding ground for these

Diphtheria Bacilli.

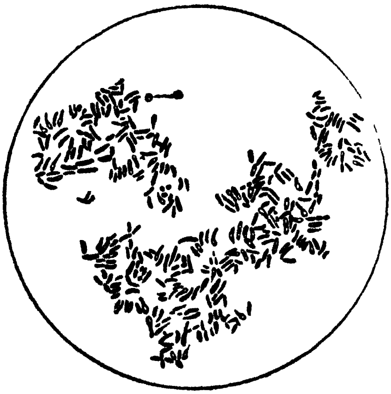


Fig. 24.

Cholera Bacilli.

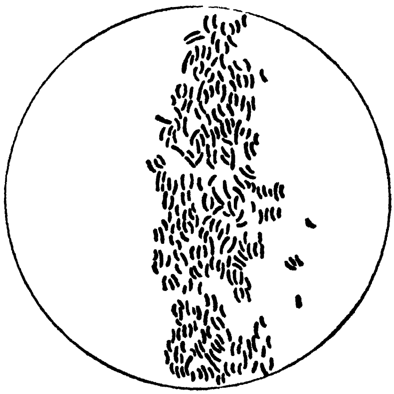


Fig. 25.

monsters they must perish. And if such a coccyx, bacillus, spirilla is to exist, it requires, in the first place, good food, consisting of remnants left by the process of assimilation, remains of food (left in the stomach undigested), or any fermenting matter; in the second place it must have sufficient moisture; thirdly, warmth (warmed rooms, not aired ones); and fourthly, a little rest (people averse to exertion).

These tiny creatures are first mentioned by Athanasius Kircherus, a Jesuit, in the year 1671. He discovered them in some decaying matter by means of a very imperfect microscope. The researches on the new discovery were prosecuted with the utmost zeal, distinctions soon drawn between various classes, and at the present day Bacteriology has developed to such an extent that it almost forms a science of itself.

Bacteria are divided according to their form into three groups,

1. Spherical bacteria (Micrococci). This name is applied to those bacteria which assume the shape of a ball immediately after the mother cell has been divided into two daughter cells.

2. Rod-shaped Bacteria (Bacilli) assume the form of a rod, i. e., the average length exceeds in extent the average breadth.

3. Screw-shaped Bacteria (Spirillæ) are like a corkscrew in shape. To this class belong the so-called comma bacilli, the most familiar type of which is the cholera bacillus, the supposed cause of the cholera. The average size of a single bacteria cell is about the thousandth part of a millimetre.

The annexed illustrations show the different forms of the bacteria magnified one thousand times.

Elastic Thread-like Mucous Expectorated by Consumptives.



Fig. 26.

Bacilli in Pure Drinking Water.

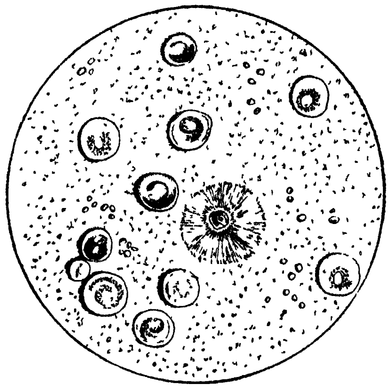


Fig. 27.

Fig. 29 shows every possible form of bacteria, spherical, rod-shaped and screw-shaped, combined in one picture. The material comes from deposit on the teeth. Figs. 21 and 22 show us types of spherical bacteria (Micrococci). Fig. 23 displays a form of cocci where the cells mostly appear in long chains, called chain cocci or streptococci; this preparation is taken from common pus or matter.

Fig. 21 is a type of coccyx which has this peculiarity that it comprises a number banded together, consisting of two parts which, although they hang together, are already beginning to separate; such bacteria are called Diplococci. The diplococci represented in our illustration Fig. 22 come from gonorrhœal matter, and are then called the cocci of gonorrhœa. Figs. 23 to 25 are examples of the rod form of the bacteria; i. e., the bacilli, Fig. 23 representing the splenetic bacillus, Fig. 24 the diphtheria bacillus as it is often found in cases of diphtheria. The latter is distinguished by its long slender rod shape. Finally Fig. 25 is an example of the screw-shaped Bacteria or Spirillæ, the so-called Vibrione or comma

bacilli of Asiatic cholera. To this type of bacteria belong also the spiral shaped windings in Fig. 20. As regards the conditions under which the bacteria live, we may say that, as with all other organisms, their first need is water. Next for their growth and development they require organic matter, albumen being best suited for this purpose. Besides, in order to thrive properly, it is necessary for them to have a certain basis or resting place which must be of an alkaline nature. All bacteria are more or less sensitive to the action of acids; they do not all need air, i. e., oxygen. Many thrive best entirely without air, others on the contrary with the addition of oxygen. Finally, it has been discovered that each kind of bacteria flourishes best in a certain special temperature varying from 20° to 70° centigrade.

Bacteria can only be destroyed when deprived of the conditions which are favorable for them, or when external and destructive influences

Bacilli in Bad Water.

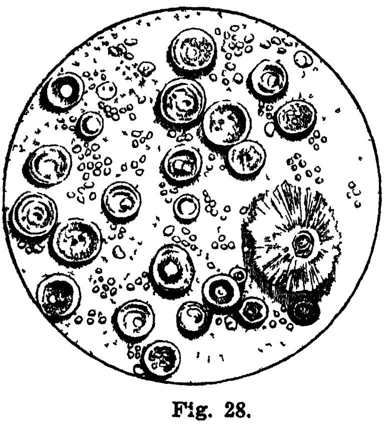


Fig. 28.

Syphilis Bacilli.

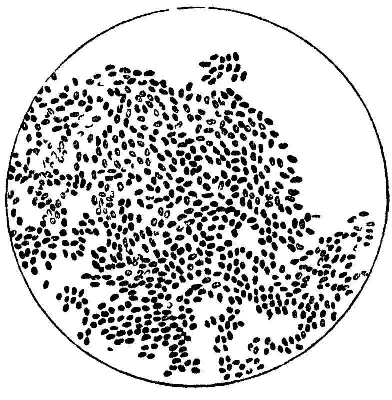


Fig. 29.

are brought to bear on them; in the latter are included, besides high temperature, chemical agencies, desiccation, light and electricity. All the above means have been employed to destroy the bacilli which are regarded by the majority of medical men as the cause of illness. Some very successful experiments have been made in the laboratory, but in their practical application to the human body these means prescribed have without exception been utter failures, principally because the means by which the bacilli can be killed, especially heat and chemical substances, are much too powerful, and destroy the human organism much sooner than they do the bacilli. Besides it is still quite an open question if bacilli are to be regarded as the source of illness at all. Practical experiments

have clearly proved that under certain circumstances they must be looked upon as such, but, on the other hand, experiments have been made which have established the fact that under different circumstances the same bacilli have not succeeded in causing the supposed illness.

Bacilli of Consumption

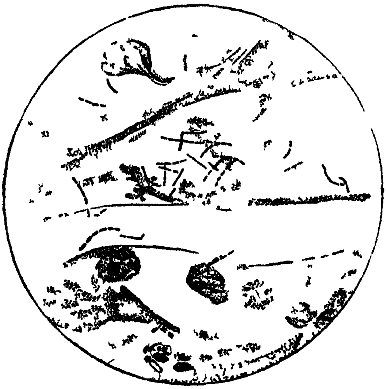


Fig. 30

Crystals Found in the Urine of Sufferers From Rheumatism and Gout.

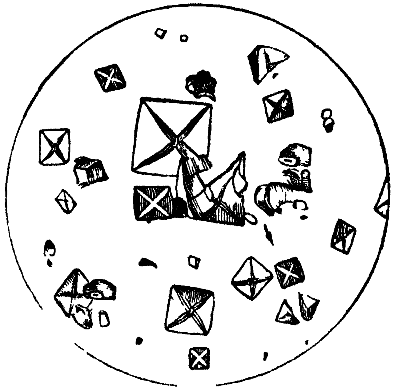


Fig. 31.

Sediment Found in the Urine of Persons Afflicted With Kidney Diseases.

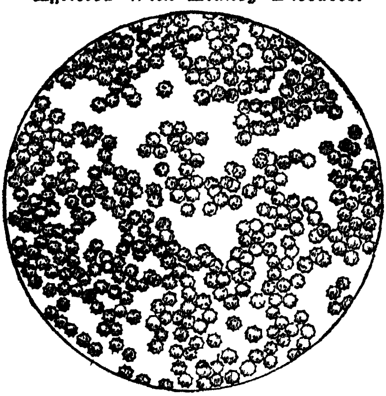


Fig. 32.

Blood Corpuscles Found in Urine.

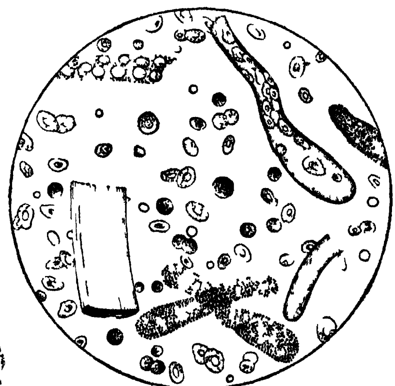


Fig. 33.

During the last cholera epidemic [illegible] 2) Geheimrath von Pettenkofer, the celebrated authority on hygiene, [illegible]me pure cholera bacilli, being convinced that these bacilli could do him no harm, and wishing to prove this in the most positive manner to the whole world and especially to his scientific opponents (Koch, etc.). Pettenkofer by no means maintains that under no circumstances could bacilli produce certain illness, but that

a special local and personal disposition is necessary as well, i. e., that the local and personal conditions must be especially favorable for the bacilli to thrive. As far as the latter statement is concerned, it is no doubt true that a healthy body treated according to the laws of the Natural Method of Healing, would afford the most unfavorable field for the bacilli, and that so far from being able to hurt such a body, they would themselves be destroyed, because they would not find the conditions necessary for their development. So, while the supporters of the Natural Method of Healing have no special dread of those tiny creatures, it would be absurd to attempt to deny the existence and the activity of bacilli altogether, as certain prominent champions of the Natural Method of Healing do.

It is at present still an open question what part bacilli have in producing disease, in fact, in what relation they stand to illness. It will probably be reserved for a later age to solve the question whether and under what conditions bacilli are to be regarded as causing disease, whether they are merely the accompaniment of disease, or are only formed in consequence of illness.

In addition to the bacilli just described we annex a few illustrations, Figs. 28 to 30, of bacilli and microscopic preparations, phlegm of a consumptive person, sediment of the urine of sufferers from gout, rheumatism and inflammation of the kidneys.

Back, Affusion, see Index.

Back, Brush for the, see Index.

Back, Massage of the, see Index.

Back Rubber, see Index.

Back, Swimming on the, see "SWIMMING".

Bacilli, see "BACTERIA".

Bad Breast, see Index.

Bad Drinking Water, How to Improve, see "CHOLERA".

Bad Finger, see "WHITLOW".

BAD HEALTH, or Treatment for Every Illness, Even Though the Name be Unknown.

The uninitiated cannot always know the nature of a disease; and not only these, but in many cases even physicians, are ignorant of it, for their diagnosis (distinguishing the character of a disease by its symptoms) is most deceptive, and it is often the medical men who err in this respect that have acquired a great name as authorities—I must tell the reader that the name of the disease is of no consequence whatever. When a person is ill his whole body suffers; and the whole body must in the first place always come under treatment.

The best thing, suitable for every patient, is always the universal remedy, the steam-bath in bed, No. 1, and he should never wait till the disease has quite broken out and till he knows what disease it is, but the great point is to nip it in the bud, to take preventive measures at its very first appearance. (See on this subject "FALLING ILL".)

For the application of a steam-bath in bed, the following rule is to be observed:

In acute attacks of illness, attended with fever, the patient is kept in the steam-bath for from half an hour to one hour, but above all, only as long as he feels comfortable, and until the fever has again obtained the upper hand. It should be followed either by a lukewarm bath (88°), or by wet rubbing of the whole body in tepid water (73°). It may be repeated as often as required.

An extra compress is applied to inflamed and painful parts of the body during a pack, which may frequently be substituted here for the steam-bath in bed.

In chronic (protracted) diseases, however, the duration of the steam-bath in bed is usually one hour to one and a half hours, and even longer, and from two to four of them are given weekly; an extra compress may also be applied in this case to the affected part. A bath or rubbing with wet towel of the whole body should follow the pack as above described. I must not omit to mention here that the patient must be taken out of the pack the moment he feels uncomfortable in it, a point to be strictly observed in all diseases, whether acute or chronic.

In acute cases (when there is fever), the linen sheet should not be wrung so dry as in chronic cases.

Besides the steam-bath in bed, the abdominal compress (which may also justly be designated a universal remedy), can be applied. In cases when the conditions of illness assume a feverish character, a somewhat thicker linen sheet is used, dipped in tepid water (73° to 77°), wrung out less thoroughly than usual, and put round the body. It is changed as soon as it gets hot or irksome. In chronic diseases, on the other hand, a sheet less thick is employed, wrung out well and applied (if in the day-time) from two hours to four hours in bed; if in the evening, it may be left on all night. Be it again expressly mentioned that in every disease the air must be fresh, in or out of doors (sleep with the window open); in most cases the diet must be non-stimulating; above all, the bowels kept open, if neccessary by means of enemata, which should also be applied for detergent purposes. For Modes of Application, see Index. In case of obstinate constipation we refer also to Enemata "CONSTIPATION", further, "CONVALESCENCE" and "MEDICINE, OPINIONS OF MEDICAL MEN ON TAKING".

If, therefore, a member of your family falls ill, apply with confidence the universal remedy, the steam-bath in bed, and with the aid of the other healing agents mentioned here,—fresh air, etc.—you will be successful in most cases.

But to give the reader a better idea of the subject, and a more general survey of the comprehensive heading "BAD HEALTH", I will give some special instructions on this subject.

TREATMENT OF ACUTE, I. E., INFLAMMATORY DISEASES, ATTENDED BY FEVER. The first thing is to examine the patient, whether his temperature is higher than usual (normal temperature is 98.6°). See Fever-Scale and Thermometer. With the hand feel his head, chest, stomach, feet; where the heat is greatest, *there* is the seat of the disease and the inflammation.

Either sponge bath of the whole body with tepid water (73° to 81°) is applied in the first place, or a lukewarm bath (88°) and the patient then put to bed; or steam-bath No. 1 applied in bed, or some fever treatment (see IBID.), a cool enema is likewise administered at once; for it is an inviolable principle, when combating disease, not to apply treatment to a single part of the body only, but at the same time to the whole of it.

If, during the examination of the body, as directed above, the greatest amount of heat and pain should be found to exist in the throat, pointing to croup or diphtheria; or in the chest, indicating inflammation of the lungs; or in the sides, suggesting pleuritis; or in the abdomen, implying intestinal inflammation of some kind—then a soothing compress or pad should be put on the affected part. If the head should be hot, combined with violent headache—symptoms which may point to inflammation of the brain or its membranes—cool compresses are placed round the head. Together with these cool compresses or pad round or on the throat, chest, stomach, head, etc., which should be changed when warm, a derivative treatment must, particularly if the pain does not diminish, be applied at the same time. It consists in stimulating packs for foot and leg, and calf also partial packs, etc. (see Index); for cold feet a hot-water bottle, wrapped in a wet cloth, may also be applied to them, or a foot steam-bath given previously. Or instead of the derivative treatment, a steam-bath in bed may be given, with a thick extra compress round the affected part. Duration half an hour to an hour, as it agrees with the patient. This application is continued (or, if agreeable, it may be alternated with some other fever treatment), and repeated as long as the heat (the fever and pain) greatly increase. The greater the heat, the thicker and wetter the cooling or soothing compresses or pads, and the more frequently they must be changed.

If there is costiveness, apply treatment given under "Enemata" and "CONSTIPATION". If there are violent pains in the intestines, etc., warm or hot compresses should be applied frequently, especially if the pain in the stomach does not diminish. In all diseases with attendant fever, keep the window always open, and sometimes the door, too; the couch should be cool, and feather-beds avoided as much as possible; the diet must be cool and non-stimulating. If the patient shivers, vigorous dry or wet rubbing must be applied; and afterwards a dry-pack, or a steam-bath in bed instead. If he perspires in this, it should be succeeded by a bath (86°—88°). If after this treatment a rash appears (the purples, small-pox, or pustules, denoting scarlatina, measles, etc.), it may be considered a very favorable sign, because with them the morbid matter in the body is generally thrown off, and the illness assumes a mild character.

In order to entirely remove all foreign substances from the system, it is advisable to give the patient affected with the purples or the small-pox a few more steam-baths in bed, or stimulating three-quarter or full packs, in which he will perspire gently; and to follow up with a bath.

In small-pox, constantly apply compresses to the face to prevent the troublesome itching which causes the patient to scratch his face, resulting in its being pitted. For further information we refer to article on Small-pox.

DIARRHŒA, see Index.

INFLAMMATION OF THE EYES AND EARS, see Index.

INFLAMMATION OF THE CAVITIES OF THE MOUTH AND GULLET, and exudation of morbid matters from them, e. g. croup, etc., are treated with cooling compresses round the throat, to be changed every fifteen minutes; or, according to necessity, coupled with a detergent or derivative treatment and gargling with tepid water (68°—77° every hour).

As already mentioned, steam-baths in bed, duration from one hour to an hour and a half, together with thick throat compresses (73°), are most efficacious. In this complaint it is also essential to give cooling, non-stimulating diet, frequent gargling or drinking of moderately cold water, nose baths, mild pure air for breathing, detergent enemata, massage of the neck and back (slapping the back). Care should be taken to keep the feet invariably warm. In acute diseases of the throat, such as croup, diphtheria, see Index. See also "CHILDREN, DISEASES OF."

TREATMENT OF CHRONIC, I. E. PROTRACTED DISEASES. For the cure of chronic diseases, of whatever kind, a strengthening or, according to the case, a regenerative treatment, is of primary importance, in addition to the often mentioned steam-baths applied in bed.

A perfectly equal distribution of the blood throughout the system is one of the first things to be aimed at; should the patient's feet be

constantily cold, rubbing of the feet with a wet towel must be resorted to as a remedy; in addition to foot steam-baths, foot-baths, followed by walking exercise, walking barefoot, etc. See also "FEET, COLD."

Chronic constipation must be removed by fruit diet and wholemeal bread, as well as by frequent and regular enemata and massage of the stomach, and hip-baths combined with massage of the stomach. Consult, furt' .r, "ENAMATA" and "CONSTIPATION."

Further, in chronic complaints great attention should be paid to the skin. Wet rubbing of the whole body with cool water (73° to 77°) or a lukewarm bath (86° to 90°) must be applied daily. For weakly people or persons not used to water, the water may be taken from two to four degrees warmer. Always begin with water that is not too cold and lower the temperature very gradually.

The system of a cronically affected patient having been improved by the above means, a more regulated treatment may be entered upon for the purpose of strengthening the affected organs and removing from the system the morbid matter and all impure substances existing in the blood. This is only accomplished by sweating cures, such as steam-baths in bed, stimulating packs, etc. But the patient must perspire gently, and often very gently indeed. Excess must always be avoided. Do not try to force perspiration; it will come of its own accord at the proper time.

The stimulating abdominal compress, if continually used at night for a length of time, will of itself eliminate a great quantity of morbid matter from the body; and many a chronic sufferer has been restored to health by it alone. Indeed, most astonishing results are obtained by it. (This compress, i. e. the sheet, must be washed thoroughly in warm water and rinsed in cold every day; and every week it should be washed with soap and boiled and dried in the open air, in order that every atom of discharged matter may be removed.) Breathing exercises, curative gymnastics, and massage must also be employed. Many chronic complaints may be treated with the regenerative, sometimes with the preliminary, treatment. Enemata, besides being applied in constipation, should also be given for derivative purposes.

If, after a lenghtened application of steam or sweating packs or compresses, etc., eruptions such as abscesses, herpes, etc., should appear, they may be looked upon as favorable symptoms.

FOR CHRONIC AFFECTIONS OF THE HEAD OR BRAIN, which may perhaps be of a gouty or rheumatic nature, compresses round the head (more or less wet, as the patient's feeling prompts), to be changed more or less frequently, together with head douches may be combined

with derivative treatment. In the same way head-baths, steam-baths for the head, nose, forehead, and mouth baths; as well as gargling (77° to 90°); dry, and wet full-packs; followed by bath are all highly beneficial.

In Chronic Affections of the Eyes the following applications are advised: Eye-baths (73° to 89°) opening and shutting the eyes in the water, gentle massage in water, massage of the eyes and throat, throat compresses, washing the eyes, bathing the head or back of the head, and derivative treatment, as well as abdominal compresses at night. Non-stimulating diet. The patient would also do well to have a sweat-pack occasionally; see "Sweating Cure." For chronic congestion of blood in the head, apply now and then cool rubbing of the feet, and stimulating packs of the legs and feet at night; as well as derivative hip-baths. See also "Diseases of the Eye."

In Chronic Diseases of the Ear use frequent gentle injections with tepid water; head-baths and head steam-baths; ear-baths and ear steam-baths; neck compresses, massage of the throat; masticate vigorously (hard crusts of bread); and, after the injections, put at night wet cotton-wool into the ear. See also "Deafness."

In Abscesses or Eruptions on the head, or in the face, apply stimulating, dissolving, local compresses; stimulating or dry full or three-quarter packs; or steam-baths for the purpose of perspiring. A bath or wet rubbing of the whole body daily; detergent or derivative treatments as well. See also "Cutaneous Eruptions," "Abscess," etc.

In Chronic Diseases of the Throat (internal or external) wash the throat frequently with cool water and expose it to the air. Further, apply local stimulating compresses, tepid garglings, bathing the mouth, and detergent treatment. Also a steam-bath in bed now and then is beneficial, besides other sweating cures. Massage of the throat for internal affections.

In Chronic Affections of the Chest or Lungs, e. g. chronic catarrh of the lungs, etc., with viscid expectoration, apply daily one or two gentle wet rubbings of the whole body; or bath, stimulating trunk and leg packs at night (the latter only if the other should not suit the patient), trunk and shoulder pack in bed during the day. Repeated gargling, drawing water up the nose, breathing exercise; and a sip of water taken after every fit of coughing. Derivative treatment; bathe the mouth, and apply wet or dry full or three-quarter packs for the purpose of perspiring, or give steam-bath in bed. Fresh air, and sleep with the window open.

In Induration of the Breast, use stimulating, dissolving compresses on the place, made of linen folded many times. When the

tumor opens, put wet lint on it, and wash it with tepid water frequently. Above all we recommend either a three-quarter steam-bath, or a steam-bath for the breast.

CHRONIC PULMONARY DISEASES (CONSUMPTION) are treated with soothing compresses on the chest, occasionally also with gently stimulating packs, or bed steam-bath, if they agree with the patient; bathing the whole body with lukewarm water (86° to 90°). However, if the latter prove too exciting for patients who are very ill, they should not be persisted in.

Stimulating packs for the feet, calves, thighs or legs. Plenty of mild, pure air, particularly forest air. Breathe through the nose, sleep with the window open, practice breathing exercises, and adopt a strictly non-stimulating diet (drink the juice of stewed fruit). See also "CONSUMPTION."

IN CHRONIC DISORDERS OF THE STOMACH, LIVER, INTESTINES, KIDNEY, GALL, etc. Stimulating trunk packs or stomach compress at night, with stimulating leg packs, cool lavations of the regions of the stomach, liver, intestines, etc. Douche for the stomach, hip-baths with massage of the abdomen, steam-baths in bed, or else stimulating full or three-quarter packs with extra compresses on the affected part; massage either of the affected part or of the whole body.

IN CHRONIC AFFECTION OF THE SEXUAL ORGANS. Tepid hip-baths (66° to 80°), stimulating stomach compress at night, and stimulating or else soothing T pack; now and then stimulating full packs, or steam-baths in bed, with extra compresses on the genitals. Besides these, local treatment is advised for females in the form of injections (77° to 81°), partial baths (77° to 90°) from two to four daily, and also stimulating compresses on sore places, e. g., for men under the prepuce, etc. For this purpose prepared wet cotton wool or linen is employed, to be changed or removed as soon as it gets dry or the patient's feeling prompts its renewal or removal. This, however, has to be done very cautiously, so as not to injure the freshly formed skin under it; the compress is either softened by wetting it, or the underlayer is left on and wetted by putting a fresh layer of lint on it.

The main requirement in these cases is a strict non-stimulating diet, and abstention from sexual excitement. See also "SYPHILIS," "GONORRHŒA," "CHANCRE."

IN "THE WHITES" (fluor albus), cleanliness must be established by injections, rinsing or washing out, and several hip-baths daily (81°). (To allow the water to enter readily the vagina should be distended by the fingers or other means. Stimulating stomach compress at night, and a wet linen cloth passed between the legs.) See also "FLUOR ALBUS."

In Protracted Hæmorrhage of the Womb, hip-baths are always the best remedy; they should be of a temperature of 73°, and last from ten to fifteen minutes; by the gradual addition of cold water they are during that time reduced to the temperature of spring water, about 46° to 51°. See also "Hæmorrhage of the Womb."

In Paralysis and Swelling of the Knee, lengthy cool or cold knee affusions are applied, or cooling compresses round it, as well as stimulating packs of the thighs or leg, with the same kind of compresses on the knee. Also steam-baths, with cool lavations to follow, are of great effect. Further, occasional stimulating full packs with extra compresses round the knee, or local stimulating packs and massage, are recommended.

In Chronic Ulcers on the legs and feet, etc., keeping the wounds clean is of great importance. Next bathe them a long time in water of 77° to 81°, continually pouring water on the wounds and ulcers, either with a vessel or with the hands; in doing so the limb has to be held up outside the water; stimulating packs of the affected parts. Sun-baths to the affected parts and a tepid bath or affusion afterwards. When walking out or taking in-door exercise in cold weather a rag with vaseline on it should be applied. For the pack (lukewarm water [77° to 86°] is used), the sheet should not be wrung too dry and extra damped lint is put on the ulcer. It should be changed according to the patient's feeling, i. e., as soon as he feels the pack to be inconvenient. See also "Drawing Bandage" in Index.

Further, a stimulating full or three-quarter pack applied now and then, or a steam-bath in bed, with extra compress on the ulcer, are of benefit. Strictly non-stimulating diet, and fresh air. In severe cases, a regenerative, or a preliminary treatment. See also, "Ulcers."

Sweaty Feet, Corns, see Index.

Nervous Weakness, Nervousness, see Index.

Paralysis of the Limbs. Repeated cold frictions of the limb with bare hands dipped in cold water, then stimulating local packs, succeeded by cold wet rubbing, partial steam-baths, full steam-baths, full packs, etc., both dry and wet sweating packs, to be changed as the patient's feeling suggests. Kneipp douches after getting thoroughly warm. The treatment most agreeable to the patient should always be chosen. Wet rubbing of the whole body, sun-baths with lukewarm or cooler douche baths, affusions, friction-baths, massage, and curative gymnastics, also applications of the Faradic interrupted current are all of great benefit.

Sprains, Strains and Dislocations. Rest for the injured limb, cooling or soothing compresses; or cold water dropping on the sprained

part, or holding it in cold water for some time. See also "SPRAINS," etc. In dislocations, the limb must first be set. (See IBID.) Stimulating compresses to be applied afterwards, but only if agreeable to the patient. Massage is especially effective here. It consists in gentle concentral rubbing, but at first not near the inflamed part, beginning by rubbing gently and then gradually more firmly. When tendons are torn, rub in every direction. (See also "SPRAINS.")

FOR ABSCESSES OF EVERY KIND, it is best to apply stimulating compresses. The harder the abscesses, and the tighter the skin, the thicker the wet linen cloth must be laid on. Most beneficial also is an occasional stimulating three-quarter or full pack, or a steam-bath in bed with extra compress on the abscess. Strictly non-stimulating diet. It is only under the hard skin, e. g. of the hand or the soles of the feet, that an incision may be made to relieve the abscess, in all other places they open of their own accord when they have matured, in consequence of these stimulating compresses. Exceptions are, however, made occasionally with very young children, or when the pains are excessive; a light prick with a needle, or a slight cut in the abscess is sufficient to help the matter to discharge and thus give relief. After it is opened, gentle pressure of the abscess will aid the discharge, and tepid water may then be dropped on it, and the pus washed off; wet lint is again put on it before another stimulating compress is applied. See also "BOILS," "CARBUNCLE" and "ABSCESS."

For further details of each disease, see Index.

It should be mentioned that sun baths, massage, curative gymnastics, and dietetic, regenerative, or preliminary treatment are of great value in many chronic diseases. No less important also is attention to a gentle action of the skin, according to the patient's condition, good air in and out of doors, sleeping with the windows open, daily opening of the bowels (enemata for constipation and detergence). See Ibid. and refer also to "CONSTIPATION" in case of obstinate costiveness. Mixed, plain, or invalid diet, suitable to the patient's strength, and breathing exercises in pulmonary diseases, etc.

Lastly, do not forget that every compress, pack bath, etc., has to be changed or removed at once, if it becomes inconvenient to the patient. If the application is on that account discontinued, a cool, tepid or lukewarm sponge both of the parts before treated should follow. For Modes of application, see Index.

The following plaster can also be recommended for ordinary boils and ulcers to which a wet compress cannot always be applied during the day-time. Dissolve equal quantities of pitch, turpentine and oxi-

crocius over a very moderate fire, and spread it thinly on a piece of linen—this is the ordinary red pitch plaster.

We have now mentioned the diseases human flesh is heir to, and given practical hints for their cure, so that everybody, though he may not know the disease, nor its name, can help to avert or to soothe it in case of need. At the same time we must point out that all the different applications, which we have enumerated above, must never be continued one after the other too frequently, so as to cause weakness and prostration instead of giving strength and recovery of health, but moderation must be observed with regard to them; and it has always to be borne in mind that it is nature only (the vital, preserving, healing force, residing within us) that cures the disease, and that we can only ***assist nature*** by these applications.

Pauses also have to be made sometimes in wearisome, chronic diseases that can only be healed slowly, in order that the patient may recoup a little; for the all-important point in the cure of diseases is to give tone to the system, and keep it strengthened, so that the innate vital force may the better be able to eject all morbid matter from the body, and thus conquer the disease. The patient must therefore study himself in this respect.

If the reader act conscientiously according to the manner indicated, and gradually makes himself more conversant with the character of the Natural Method of Healing, he will soon experience the beneficial results of it and acknowledge what a blessing that system really is, and he will gradually rid himself of the monstrous error that healing is only possible from medical science, and exclaim with me, "Thank God, I have at length vanquished this error, this fatal prejudice, which has sacrificed health and life and caused endless expense." See also the observations made under "REPORTS OF CURES," and under "THE NATURAL METHOD OF HEALING." Further, "OPINIONS OF MEDICAL MEN ON THE USE OF MEDICINE," and "MAXIMS AND MOTTOES" in Index.

Bad propensities, see "HABITS."

Bad propensities, how to get rid of them, see "DISAGREEABLE HABITS."

Baking, see Index.

Baldness, see "HAIR, LOSS OF."

Bandages or Local Compresses, see Index.

Bandages or Dressing, Temporary, see illustrations under "COMPRESSES."

BANDAGES, or local wrapping, see Index "BANDAGES" from ***Dr. Ruff's*** book. The act of enveloping with any kind of wrapper, according

to certain rules and for a curative purpose, a part of the body suffering from injury or ailment, is called "bandaging." The material, or materials, used for the purpose—considered as a whole, when they have been put on in proper form—constitute the bandage. Bandages are here classified and described according to the manner in which they are prepared; and to their purpose, situation, and form.

1. Bandages for Wounds. The object of these is to protect a wound from pressure, blows, dust and dirt, etc., and to forward the healing process. If it is a case of a fresh cut, it will be sufficient to apply sticking plaster, in such a manner as not to drag the edges of the wound apart but to bring them together as closely as possible; provided that no inflammation, swelling, pain, or suppuration sets in. Only the more serious, and widely gaping, incised wounds will require to be sutured, or stitched. This is done by the doctor or surgeon, with a bent needle.

Bent Needle, With Thread, for Stitching Together the Edges of a Wound, in Severe Injuries.

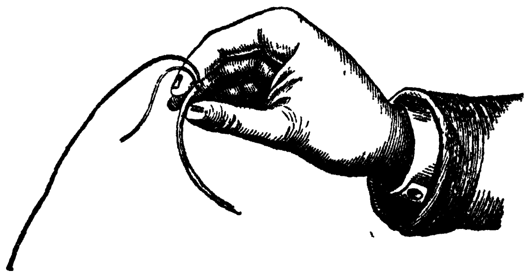


Fig. 34.

Fig. 34 shows such a needle threaded. Each stitch is separate. When the needle has passed through both edges of the wound, the short end of the thread is let slip out of the eye, and the long end is cut off short within two or three inches of the wound. The two ends of the thread are then knotted, the edges of the wound having been brought and held as near together as is possible to get them. After the wound has united, with the help of sticking plaster or sutures, it and the surrounding parts should be kept covered with cotton-wool which has been chemically freed from oil and other deleterious matter, or with clean lint; and should be protected from blows, pressure, dirt, etc., by a bandage—whether of cloth, or linen strips—put on and fastened in the manner which will best answer the purpose. Suppurating wounds, ulcers, abscesses, and all other painful and inflammatory processes on the

Forehead bandage.



Fig. 35.

Eye, or ear, bandage.

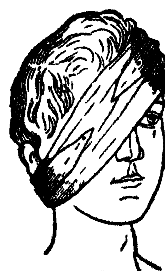


Fig. 36.

surface of the body must, in like manner, be protected from the above mentioned sources of injury.

In the following pages we will describe the forms of bandage which are at the same time most useful and most easy of application by unskilled persons.

Head Bandages: Forehead Bandage. Take a three-cornered cloth or handkerchief of sufficient size; fold it like a cravat; lay the middle of it on the forehead, and pass the ends round the head, either tying them at the back, or crossing them and bringing them round again to the front, where they can be fastened either by knotting or with safety pins.

An Eye or Ear Bandage is one which passes diagonally across the forehead and face (Fig. 36), the middle of the bandage being then over the eye. If either of these, or the forehead bandage, is to be extra tight, it must be long enough to go twice round and tie; and the second turn must be crossed in the manner shown in Figs. 37, 38, which need no explanation. They are then called knot bandages. If the wound is on the chin, and if the bandage is to be applied there, the so-called "chin-sling" (Fig. 39) is used. This is managed in either of two ways. The first and simplest consists of two ties, or cravat bandages,

A knot bandage.



Fig. 37.

A knot bandage.



Fig. 38.

Chin sling.



Fig. 39.

each of which goes only once round. The middle of one of these is applied under the chin, and the ends tied on top of the head; the middle of the other is then laid on the upper part of the chin and the ends passed under the ears and tied behind. The second form of chin sling is thus made and fastened on: Take a three-cornered cloth of which the longest side is at least a yard and a half long; mark the middle line of this, by bringing the two ends together, and creasing the fold

in the middle to about two and a half or three inches from the long edge; now cut, with scissors or knife, from each side towards the crease, so as to leave the longest part of the bandage a strip about three inches wide; but stop cutting at a point about two inches from the crease on each side; fold up the rest of the bandage, cravat fashion, about the same width as the "strip," and as far as the cut. Thus will be formed a kind of twin cravat bandage with four ends, and united in the middle by an uncut portion about as wide as the chin to be "slung.' The folded part is held up under the chin while its ends are tied on top of the head towards the back; the strip then grips the chin above, the long ends being passed back under the ears, crossed, and brought forward again and up, to be tied or otherwise made fast over the forehead. (Fig. 39.)

We come now to the small and the large three-cornered, and the large four-cornered, head-cloths which belong to this class of bandages. All three serve the purpose of enveloping the whole head, with the exception of the face; or of keeping plaster, lint, etc., on it. They are applied as follows: The small three-cornered bandage, unfolded, is laid with the longest side over the forehead, and the point hanging down behind over the nape of the neck; the long ends are then brought back, crossed over the hanging part, and round again to the forehead, where they are tied. The hanging part is then brought up over the crossing of the other part to the top of the head, where it is pinned to the knotted ends. The longest side of this bandage must be a yard and a half long. (Fig. 40.) The large three-cornered head-cloth has cuts in it like the chin-sling. It is applied, unfolded, exactly like the small one, except that the long ends are tied under the chin, while the others are crossed behind and fastened above the forehead. (Fig. 41.) The

Small three-cornered head-cloth



Fig. 40.

Large three-cornered head-cloth.



Fig. 41

large four-cornered head-cloth is used thus: Fold it lengthwise once, not in the middle of its width, but so that the upper lap (marked A in the illustration Fig. 42) is two or three inches narrower than the under one (B in Figure 42). Now lay the bandage on the head, the narrow lap uppermost, so that the ends hang level at the sides; and that the eyes are covered by the under lap; draw the two ends of the upper lap (*a, a* in Fig. 42) tight under the chin and knot them; fold back the middle

Large four-cornered head-cloth.

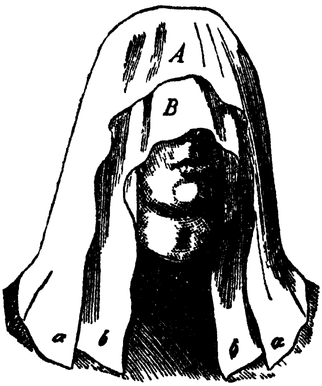


Fig. 42.

The same, completed.



Fig. 43.

part of the lower lap (*B*, Fig. 42) over the other, draw out its ends (*b, b*, in Fig. 42) and lower edges until the bandage sits closely about the head, and then turn them back and knot them behind. The effect should be as shown in Fig. 43.

BODY BANDAGES: THE THREE-CORNERED BREAST-CLOTH. The wide angle is laid on one shoulder while the long side is passed round the body below the nipples. The ends are knotted or otherwise fastened behind, in such a position as not to make the patient uncomfortable when lying down. The folds of the part remaining loose on the shoulder are then carefully gathered up so as to lie on the neck, and the end is fastened to the knotted part.

THE SUSPENSORY BREAST BANDAGE (Fig. 45) is cut in the same way as the large three-cornered head-cloth. The "strip" is then passed round the body under the breasts, and its ends are made fast behind. The two ends gained by the cutting of the cloth are passed, one over the shoulder on the sound side, the other under the arm on the other side, and tied or fastened together at the back, at the point where the remaining free end can best be brought to join them. The bandage as a whole must be adjusted so as best to effect its particular purpose;

and the fastenings should be arranged with a view to the patient's convenience when lying. The folds passing over the shoulders and under the arm must be carefully turned in so as not to irritate the skin of the neck and arm-pit. (Fig. 44.) Both of the above forms of bandage are useful in affections of the female breasts, or where it is necessary to take precautions against that form of malady—as when an infant is weaned.

The three-cornered breast-cloth.

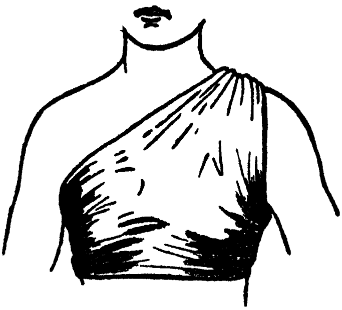


Fig. 44.

Suspensory breast-bandage.

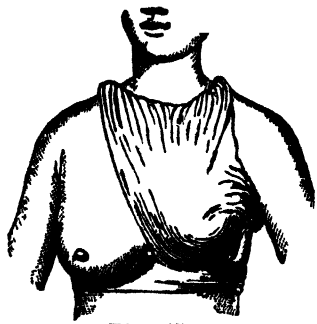


Fig. 45.

We will here notice SHOULDER BANDAGES. To form a single shoulder bandage, take a three-cornered cloth of sufficient length, folded like a cravat; apply the middle of it under the arm on the affected side; cross the ends over the shoulder; bring one diagonally across the back and

Single cross-bandage.



Fig. 46.

Bandage for both shoulders.

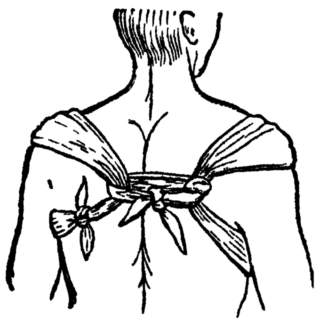


Fig. 47.

under the arm on the sound side to the front, and there knot it to the other, which crosses the chest diagonally to meet it. (Fig. 46.) If both the shoulders require similar attention, take two such folded cravat bandages, one of which may be shorter than the other; lay one on

each shoulder so that the ends in front hang rather lower than their corresponding ends behind; bring the ends of the shorter of the two together, the end from the front passing under the arm on its own side, and knot them behind, leaving the bandage loose. The ends of the longer bandage are brought together in like manner at the back and tied once (intertwined), but not knotted until one of them has been passed through the other bandage. The finish should be made so as to bring an equal strain on both bandages, and to show a symmetrical pair of loops behind. (Fig. 47.)

The Crossed Bandage for the groin is applied thus: The folded cloth is passed round the affected leg as high up as possible, the middle point of it being behind, and the ends crossed in front over the groin. The ends may be brought together finally in either of two ways: by carrying on each of them in the direction which it followed to the point of crossing; or, intertwining them at that point, and so changing the direction. In either case one end goes round the waist behind and meets the other on the sound side above the hip; where the two are knotted. A pad may be inserted under the crossing. (Figs. 48, 49.)

Simple cross-bandage for the groin.

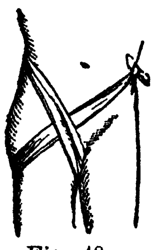


Fig. 48.

Twisted cross-bandage for the groin.

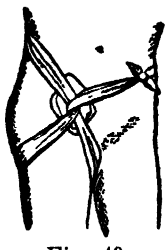


Fig. 49.

T-bandage with two cloths.

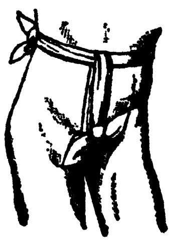


Fig. 50.

The T-Bandage consists of two cloths, folded separately as before. One of them is simply tied round the waist; the other forms a double sling from it, thus: Pass one of its ends down between the waist bandage and the body, at the middle of the back, and draw it through rather beyond the middle point of its length; then let the upper end fall outside the waist bandage; bring both ends through to the front between the legs; carry up the one next the body behind and over the waist bandage in front, and down again to meet the other, knotting the two together. (Fig. 50.)

Bandages for the Limbs. The sling for the arm we have already referred to under its own title; it remains for us to describe the cross bandage, and the enveloping bandage, for hand and foot.

If the Hand is to be Cross-Bandaged, the flat of it should be laid on the middle of the bandage, a three-cornered cloth folded cravat-wise. The ends are then crossed diagonally on the back of the hand, and again at the wrist on the inside; they then take one or two turns in opposite directions round the wrist, and are knotted. (Fig. 54.)

Cross-bandage for the hand.



Fig. 51.

Cross-bandage for the foot.

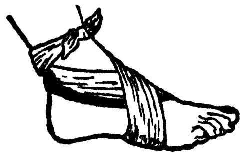


Fig. 52.

Enveloping bandage for a finger tip

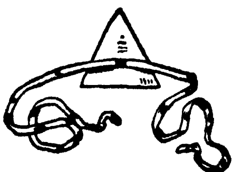


Fig. 53.

Enveloping bandage on the hand.



Fig. 54.

Enveloping bandage for a foot.



Fig. 55.

Completed finger bandage.

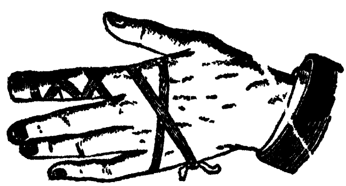


Fig. 56.

Finger stall bandage.

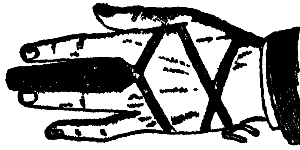


Fig. 57.

The Cross-Bandage for the Foot is formed in a similar way, the finishing crossing-turns being taken round the leg above the ankle. An Enveloping Bandage for the Hand is made by placing the hand, palm downwards, in the middle of a three-cornered cloth, the fingers pointing to the wide angle. The latter is brought back and

laid over the back of the hand; the two long ends are brought forward and crossed over the same, again at the wrist inside, and fastened as in the case of a cross-bandage, with crossing turns round the wrist and a knot. (Fig. 54.) A similar course is followed if the foot is to have an enveloping bandage, up to the point of fastening; when, instead of being knotted together above the ankle, the ends are brought forward again, crossed over the instep, passed round and under the hollow of the foot in opposite directions, and knotted or pinned together on the top. (Fig. 55, in which *S*, over the second toe, indicates the part of the cloth referred to above as the "wide angle," *R* and *L* the two "long ends," right and left as looked at by a person standing in front of the foot.)

An Enveloping Bandage for a Finger is applied in the same way as for the whole hand; except that, instead of a three-cornered cloth a small triangular piece of linen, cut to the required width, is used, and made fast round the finger by tapes sewn on to it, as shown in Fig. 53. These tapes are passed round the finger in opposite directions, crossing each other above and below it at each turn, and finally at the wrist, where they are knotted together. Fig. 56 shows such a finger bandage completed (but the tapes there appear to be fastened round the hand instead of round the wrist). Fig. 57 shows a Finger-Stall Bandage.

Bandages or Dressing (temporary), see Index.

Bandage, Plaid, see Index.

Bandage, Suspensory, see Index.

BANTING-CURE. A procedure, adopted and recommended for obesity and corpulence, by Mr. Banting, an Englishman. It consists in eating only lean meat, fish and light vegetables, avoiding all kinds of puddings, bread, potatoes, milk, beer and brandy.

We do not recommend this regimen, but refer to our prescription of diet in "Obesity."

Barefoot walking, see Index.

BASEDOW'S DISEASE (mostly affects the female sex). Affections occur in this disease simultaneously in different organs lying distant from each other, e. g., the heart, throat, eyes.

Symptoms.—Very violent palpitation of the heart, quick pulse, the eyes starting from their sockets, increased lachrymary secretions, after a few weeks swelling of the thyroid gland (formation of goitre), green sickness, want of blood, derangement in the digestive organs, emaciation.

Causes.—Violent agitation of mind and nerves; strong emotion, such as fright, grief, care; also injuries, disturbances in the system.

TREATMENT.—First of all, mental and bodily rest; invigorating treatment, and perfect attention paid to the skin, breathing plenty of pure fresh air, sleeping with the window open. Several eye-baths (73° to 78°) a day, gentle massage of the neck, throat and eyes once a day; at night try a lukewarm compress on the region of the eyes. Daily, in some cases every other day, a lukewarm soothing full-pack (77° to 86°) together with hot-water bottle, wrapped in a wet cloth, to be put to the feet till they are thoroughly warm, then a (72°) (tepid) rubbing of the whole body with a wet towel. Also half steam-baths, followed by a (88°) bath with neck affusions, have a good effect. Gentle magnetic treatment of the sympathetic nerve on both sides of the throat has proved efficacious in many instances. See also "GOITRE," as well as reports of case in "BLOOD, POVERTY OF."

Baths, local, for the hand, arm, elbow, leg, see Index.

Baths, tub, shallow, full or river baths, warm and hot tub or hip-baths, see Index.

Bath rash, see Index.

Baths (local), see Index.

Baths, all kinds of, see Index.

Bath, Rocking, see Index.

Bath, "Universal," see Index.

BATHS. Tub, shallow, river bath, hot or cold tub, hip- or sitz-bath, see Index.

BATHS, Hot air. In this kind of bath hot air is used instead of steam or vapor to provide a high temperature. The hot air is conducted into rooms or box-baths specially arranged for the purpose. For further information consult the articles on Russian, Turkish, and steam-baths and hot-air box-baths.



Fig. 58

BAUNSCHEID'S INSTRUMENT, also called "Life awaker," is an instrument furnished with a great many small needles, and which, when the skin is gently beaten with it, produces a great number of needle-pricks. By means of this local irritation, which may be increased by applying croton or some other irritating oil to the parts, Baunscheid intended to promote excretion, and to counteract stagnation of blood, etc. He applied his treatment to parts of the body opposite to those affected, in order to divert the increased flow of blood from the seat of the disease. This irritation produced an inflammation of the skin, with pustules similar to those caused by issues or setons, a result, however, attained more easily and more thoroughly

by our Natural Method of Healing by applying stimulating packs, steam compresses, etc.

Bean Soup, see Index.

Beauty, see "COMPLEXION."

Beauty, see "BEAUTIFYING THE COMPLEXION."

Beds, see Index.

BED for Invalids. The head and foot of this practical bed are adjustable and can be moved into any required position by turning a crank, so that the patient can be raised or lowered as desired. On one side is a table which is also adjustable and can be easily raised or lowered by the patient. If the table is not required it can be turned

Adjustable Invalid's Bed.

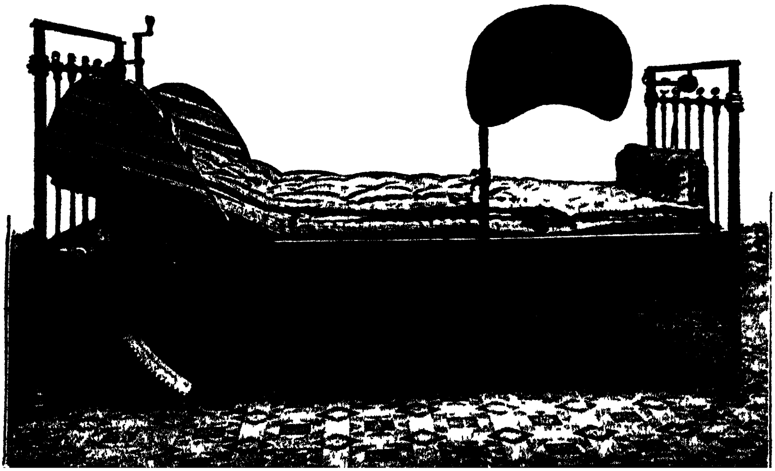


Fig. 59.

up out of the way. There is a head-rest on either side of the top end by which the patient's comfort is augmented. The beds can be had with or without a night-stool.

Price of the bed elegantly finished and upholstered with horsehair, $75.00; with night-stool, $87.00. To be had of Horst Tittel, Dresden, Germany.

Adjustable Bed. (The patient in a sitting posture.)



Fig. 60.

Bed wetting, see Index.

BEDSORES occur in long, tedious diseases, e. g. typhus, dropsy, also confinement, etc.

Air-cushions.

Description, see "Air-cushions."

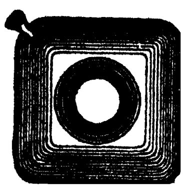


Fig. 61.

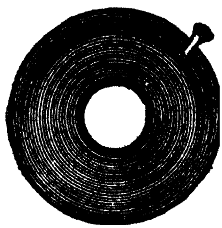


Fig. 62.

For their avoidance, frequent cool, or rather cold lavations, and wet rubbings especially of parts of the back have to be applied; this will be more effective if the water is mixed with an equal quantity of vinegar. The parts affected must be kept strictly clean, and repeated change of the patient's position is necessary. The sheet must always be drawn tightly over the mattress so as to avoid creases. If the skin

Water-cushions.

Description, see "Water-cushions."

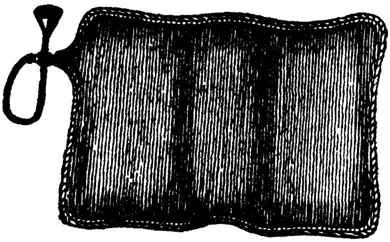


Fig. 64.

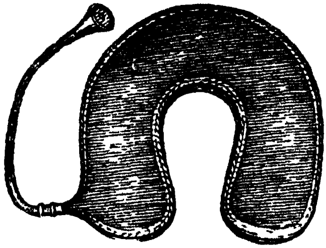


Fig. 63.

is already blue in places, air or water cushions (Figs. 61, 62, 63, 64) or a rolled-up or folded linen cloth, must be put in such a way as to prevent the affected parts from touching anywhere. Soft chamois leather, tanned deer-skin or linen spread with purified vaseline may be used as a support for the affected parts.

The greatest care must be taken to keep any sores clean, by frequently dabbing them with soft linen dipped in (80° to 86°) water. Put also compresses (80° to 86°) on the wounds. If agreeable, cool or cold water may be used for the pads.

If practicable, a lukewarm (90°) bath may be given now and then, with simultaneous copious irrigation of the sores and blue places. The bath-tub can perhaps be moved close to the bed.

BED, WETTING OF THE. Children and young people as individuals are most liable to this complaint; in many cases it is simply a bad habit arising from defective training, often, however, the patient is powerless to alter this condition.

The following directions should be observed. Fluids must not be partaken of late in the evening, and the evening meal should consist by preference of solid, easily digestible food. Fruit must be absolutely prohibited in the evening, especially apples, as fruit has the property of expelling fluids from the body in the form of urine, consequently it is advisable to eat a few apples at the midday meal in order to get rid of the supply of urine before going to bed. The bed must not be too soft or warm, and the child should sleep on his side. The latter should also be made to empty the bladder before going to sleep. It should be noticed during the day-time how long the child is able to go without passing water, and he should be roused once or twice during the night to urinate. Punishing the child, causing him to go to sleep with feelings of fright, often has the reverse effect from that intended. If, how-

ever, some remedy, possibly inert, be administered to the child with the assurance that it will have the desired effect, it will produce confidence; the child goes to sleep with a feeling of hope instead of fear, and is frequently awakened by the desire to pass water.

One or two lukewarm (72°) rubbings of the whole body with a wet towel daily, and hip or trunk baths (76°) of ten minutes, or (54° to 65°) of five minutes' duration are beneficial, as also wading in water over the calves for one or two minutes. with abdominal or T pack (77°) three times a week combined with calf-packs to be worn all night. The application of the Faradic current has proved effective in these cases.

Moral influence should be brought to bear on the child to induce habits of self-restraint, so that he may wake spontaneously in the night to obey the call of nature. In the case of an adult suffering from this complaint, we would recommend walking with bare feet, daily baths or wet rubbing, knee affusions, affusions over the uper part of the body, in general strengthening treatment. (For Modes of Application, see Index.)

One authority recommends a mechanical cure for this malady. It consists in making the patient micturate through a small hole, which requires his full attention to be paid to the action, so that he awakes at night when it is necessary to pass water.

Medicines and patent remedies are absolutely useless.

If caused by some more deeply seated disorder or by nervous weakness, a strengthening treatment should be adopted.

Incontinence of urine sometimes occurs in children suffering from worms in the rectum, these causing irritation of the bladder. (For the removal of the latter, see "WORMS".)

BEDROOM, see Index.

BEE STINGS, as well as the stings of other insects, such as wasps, often cause inflammation. They should be treated with cold or cool compresses or bathed in cold water. Curds or clay placed on the wound will also relieve the pain; but first try to remove the sting, which can be done by drawing the skin tight and passing the thumb nail firmly over the injured place till the sting or poison is forced out.

Beer, strong, see Index.

Beer soup, see Index.

Belching, see "ERUCTATION".

Bite by an adder, see "SNAKE BITES."

BICYCLING. Within the last few years I have been besieged with requests from anxious parents, young men of weak health and others

to give my views on the advantages and disadvantages of bicycling, which I accordingly do. In a brief pamphlet (which *Bruno Ziergiebel* of Leipsic-Reudnitz will forward gratis and post free on application) *Dr. Reyher* expresses himself as follows: Bicycling is the sister of gymnastics; it possesses, however, this advantage over the latter that it has even greater stimulating effects in increasing our capacities, while, with the growth of the latter it offers keener enjoyment and a greater variety. By far the greater number of bicyclists come from towns. In fact, a town population is the one which most requires refreshing exercise and healthful recreation in the open air. We all of us suffer more or less, but especially those who live in large towns, from an insidious disease which, for brevity's sake, we will call a craving for air. It is this that drives the masses, as soon as they can obtain the necessary leisure, from the oppressive atmosphere of their dwellings into God's glorious nature. People who live in towns suffer especially from the disadvantage of using their bodily powers on the whole either too little or in a one-sided manner.

From this it would appear that any moderately healthy person, especially if he lives in a town, ought to answer the question, "Shall I bicycle?" in the affirmative. Bicycling is the most convenient way of satisfying the longing for air, because it takes its devotees into really fresh air much more easily and with much more certainty than a short walk. Briefly, the matter stands as follows: The atmosphere of towns is rendered impure by exhalations of all kinds, not merely in the houses and streets, but (in the case of large towns) in the suburbs also for a distance of one or two miles, especially in the direction of the wind which happens to prevail at the time. This is where the advantage of the bicycle comes in. It carries its rider cheaply and conveniently out of this foul atmosphere: in the open country he gets rid of this poison much more completely than the man who takes a quiet walk to the nearest country inn, in fact much more completely than any pedestrian, because the exertion of bicycling, however slight it may be, calls for deeper and more effectual breathing. The bicyclist flies out when and where he will, and even if he only gets a very short distance from home, he has during the course of his ride taken in double the quantity of air, and it is precisely air that the excursionist goes in search of. Besides this, we must not lose sight of the advantages accruing from the exercise of the body. People who spend their days in what we call a sedentary occupation make only a very partial use of their bodily powers; those who draw, write, etc., practically do not use them at all. The inevitable consequence is that the capacity of the body for work is impaired, and although it may not be essential to be a Samson in order to live, still it is not exactly pleasant

to be consigned before one's time to the ranks of the weaklings. Our body (I am speaking now of the muscular system) requires exercise in order to maintain its strength, and assimilation must be kept up to secure its further development. Without exerting the body and without the constant enjoyment of fresh air, the matter which the function of the organs prepares for secretion is liable, especially in the case of phlegmatic natures, to collect in the blood in a state of backward development, and when it passes the state of dissolution it remains in the body and more, especially if the blood of the person in question happens to be in a chemical sense sour in consequence of eating too many sweet or sour foods: this comes from the above-named diet and through lack of exercise in the open air. This is the origin of chronic gout and of certain kinds of stone in the knidneys, the bladder and the gall, very troublesome visitors, which may be described as partly inorganic, frequently causing intense pain and liable on occasions to be dangerous.

The man who has never ridden a bicycle and imagines that a "wheelcrank" only exerts the muscles of his legs in bicycling is wrong. The veriest tyro in bicycling would soon tell him that this is not the case; in fact, it is precisely the beginner who notices after a ride how "done up" his arms are, though at first, of course, he is apt to use them more than is necessary. The muscles of the trunk are also unconsciously exercised in bicycling, by the necessary balancing (easy though it be) and swaying of the body. The active exercise of the lower extremities, together with the deep breathing, give the organs of the stomach in particular a very effectual stimulus which is shown in the easy and copious evacuations of the bowels. If the exercise be uniformly repeated the motions will become regular, a point of first-class importance, on which too little stress is laid. It all depends on a regular "ebb and flow" in the organs of the stomach, because the movement and distribution of the blood in the whole of the body is influenced by this. Numbers of people suffer from headache, oppression of the chest, palpitations of the heart and similar complaints, caused simply and solely by irregular action of the bowels.

The following striking example shows how far the free flow of blood, for which bicycling is so favorable, can remove even local inflammations, to which the eyes, e. g. are particularly subject on account of excessive work by artificial light, especially when the latter throws out a strong warmth on to the head. A bookseller, by name of G. W., member of a bicycling club, suffered for twelve years without intermission from iritis, i. e., a somewhat serious inflammation of the iris, and in most cases of the cornea as well, caused by working in winter by artificial light; since he has taken to bicycling more regularly he has been entirely

free from it. In the same way headaches are constantly experienced by people who, though otherwise healthy and well-nourished, do not obtain sufficient violent exercise in the open air.

Thus we are provided with a second argument in support of our advice, that partial invalids no less than healthy people, but above all those who live in towns, occupied with brain-work or some sedentary employment, ought to bicycle, to keep themselves free from the ten thousand little complaints of ordinary life.

The exercise of this noble sport has also a beneficial influence of considerable importance on the development of the lungs, and of their capacity for breathing. The deep inspirations, unavoidable in bicycling, expand those important organs—the lungs—in a most salutary manner. A reasonable amount of bicycling quickens a fresh portion of the lungs which are either stagnant or, as it were, asleep; this increased change of air is, consequently, favorable to the *nervus rerum* of human life, the never ceasing change of tissue.

This exercise in the open air has a further salutary influence on the skin, stirring up its two million sudoriparous and subaceous glands to increased activity. (For further information on the skin and its importance to the body, see Index.)

If we sweat profusely in bicycling, we take, as it were, a steam-bath, we cleanse the pores of those millions of little tubes, and loosen the dried surface of the skin. But this imposes a further duty upon us: after every ride we ought to be very particular about taking a lukewarm bath, and rubbing ourselves down vigorously. It is wonderful how this removes all fatigue from the limbs and gives us that feeling of genuine healthy vigor which we try to secure by bicycling. Naturally, if a bath is not possible, a wash down with lukewarm, and afterwards, if we choose, with cold water, may be substituted for it. Perhaps in the near future even the smallest towns will boast of a public shower bath for the devotees of bicycling. That would be a blessing which cannot be rated too highly, and the ideal clubhouse would certainly be one which, instead of a miserable basin, placed at the disposal of its members a few cabins with shower-baths of variable temperature.

Finally we must not forget the advantage accruing from the strengthening of the nervous system; this will be felt most of all by such as have previously belonged to that class of irresolute and timid people whose nerves are weak, but it appears just as much with others. Merely to get over the dread we feel, which is frequently not inconsiderable, of trusting ourselves to such an unsteady thing as a bicycle, constitutes a victory over a kind of nervous weakness, as soon as the pupil has learnt to sit at all firmly on the saddle. Besides, even without knowing it, the eye learns to

recognize obstacles, to find a way out and to estimate real dangers at their proper value.

Am I to bicycle then?—Yes, ten thousand times, yes, as long as—here we come to the old saying, "What is one man's meat is another man's poison"—you don't suffer by it. There are certain illnesses which, without compelling us to keep to our bed, at the same time absolutely preclude us from bicycling.

First and foremost come organic diseases of the heart and affections of the valve of the heart. This organ has in each of its two chambers a flat valve, shutting off the chamber from the auricle, and pocket-shaped valves in the large blood vessels opening into the auricles. The object of this system of valves is to regulate the movements of the blood in such manner that, with the contraction of the heart chambers, no blood can penetrate into the auricles, and when they are relaxed, no blood can return to the large vessels. It would take us too far to follow the circulation of the blood in detail; reference may be made to the article on this subject. If one of these valves be distorted too much by a general enlargement, or if a deposit be formed exactly at the point where it touches the edge of the opening that it ought to close, then the circulation of the blood is interrupted.

Every action of the heart causes a little and then gradually more blood to flow back to the spot from which it had been forced. Consequently the heart must work harder than would otherwise be necessary in order to perform its duty, and this leads eventually, though it may not be for some time, to an enlargement of the heart—at times enormous—which interferes with the oxygenization of the blood in the so-called small or pulmonary circulation, and, in this way, finally brings on death. So, before devoting yourself to this healthful exercise, assure yourself that your heart is sound. If the very slightest weakness be revealed, such as described in the above account, you must say good-bye to anything that makes great demands on the powers of the body and might still further increase and accelerate the action of the heart.

A further barrier— and one by no means to be treated lightly—would arise in case anyone has had an apoplectic stroke, however light it may have been; this is fortunately seldom the case with young people, still it deserves notice in this place. A more rapid circulation is only possible if the blood is subject to higher pressure by increased activity of the heart, and of the respiration throughout the whole arterial system, but most of all through its finest ramifications, the so-called capillary vessels. Now, as an apoplectic fit is after all nothing but a rush of blood into the brain or its covering, which consists of comparatively larger and of the smallest capillary vessels, and, even if it be successfully got over, leaves scars

behind, it is obvious that such a semi-invalid has to avoid any unnecessary exertion of the heart.

There are also some people who, even if they only cycle to a moderate degree, excite the intestines to such an extent as to cause pains and even vomiting. The connection between cause and effect is not always so easy to trace in such cases; at any rate such persons would do well to see if, after moderate riding and a very gradual increase in their exertions, they feel on the whole so much stronger and better, that the above-mentioned symptoms disappear, they should not attempt to force themselves in any way, supposing that does not suggest itself to them by the fact that the complaint grows worse.

By far the largest proportion of those people who ought to answer the question "Shall I bicycle?" in the negative are those who suffer from pulmonary diseases—in short, consumptive persons. In the early stages of such diseases bicycling may be beneficial and even bring about a complete cure; but when they have reached an advanced stage, it cannot but be detrimental, especially if there were any considerable amount of spitting of blood. The guiding reasons here are very much the same as in the case of apoplectic fits. In the former the blood remains staionary in the lungs under greater pressure, so that a further strengthening of the same threatens to cause a further bleeding of the lungs; and no man, not even an acknowledged authority on the subject, can say with certainty beforehand if a renewed bleeding will or will not result in a hemorrhage. It is, of course, self-evident that all affections of the joints of the limbs—one might say of the body, too—require that we should abstain from all unnecessary exertion of the same. When such pains are recent and painful, naturally no one would ever think of going out on a bicycle, but even old injuries of this kind will not get better unless we take reasonable care of our limbs; proper systematic massage of the injured joints produces very much more satisfactory results than violent exercise of the limbs. The same caution would be required in cases where the joints are troubled by symptoms of gout. Active exercise in the open air has been proved to be of immense benefit even in cases of chronic gout, so long as there was only a small deposit of uric acid outside the joints; it would be correspondingly injurious if this deposit had formed inside the joints, as they almost invariably spread on those parts of the bones that are most exerted.

Confirmed invalids, naturally, have no business to bicycle, whatever the cause of their illness may be.

There still remain thousands of people who are not debarred for any of the reasons just enumerated, and who suffer from nothing more than the inevitable little complaints of life, especially in towns. To them our advice is—go and try bicycling. The learning stage is soon passed, and

then all difficulty vanishes. Without a shadow of doubt they will soon be thanking their stars that they took to the flying wheel, which gives them not merely keen enjoyment but a marvelous panacea for all the petty complaints of life.

There are scores of people whose only hindrance is a pitiful slackness but even this barrier to all bodily and intellectual activity is soon removed from mind and body by mounting the wheel. Ladies, too, are strongly recommended to bicycle. There have been cases by the dozen in which delicate women and young girls have grown strong and healthy by bicycling regularly. All women, of course, must be careful to wear loose and not tight garments. Even little girls of nine or ten may begin bicycling, and boys a year or two sooner.

Naturally children and delicate women must not over-exert themselves by riding too fast or too far.

Bicyclists, Staying of, see "SUGAR".

Bilberries, see Index.

Bilberry Soup, see Index.

Bilious Colic, see Index.

BILE. Bile comes from the liver. It is formed in the hepatic cells, collected in the gall-bladder, and discharged through a narrow duct into the duodenum. It has been ascertained that an adult secretes nearly a pint of bile a day. Bile is a digestive juice (chyle) which serves principally to assist the digestion of fat. By means of it the fat is most finely distributed, and in this form it can be received into the intestinal lymphatics, which protrude like fingers into the intestines and absorb the prepared chyme. The bile also posseses the property of preventing the half-digested food in the intestines from lying idle. From this we can see that diseases of the bile-producing organs may lead to very considerable trouble in our organism in consequence of the important functions which fall to the lot of this digestive juice in the body.

Bile-Bladder, see "CHEST AND PERITONEUM, ORGANS OF THE."

BILIOUS FEVER. Bilious fever is the name generally given to the fever which accompanies catarrh or inflammation of the stomach, and of which is the chief characteristics are a bilious taste, yellow furry tongue, yellowish tint of the skin and of the white of the eye, bilious vomiting, etc. Medicine and inappropriate diet are very apt to make it torpid and nervous.

TREATMENT.—Fever treatment. Abdominal compresses to be renewed according to circumstances. Torpid fever treatment to be applied for a torpid case, a typhoid treatment for a nervous case. For the rest, fresh air, cold water and cool non-stimulating form of diet.

KNEIPP CURE.—Washing of the whole body on rising. In the evenings short wrap for two hours. For Modes of Application see Index.

Similar to bilious fever is pituitary fever (febris mucosa or pituitosa).

BILIARY PASSAGES or Ducts. Stricture or oclusion (atresia) of the biliary passage may arise from catarrhal swelling (intumescence) gallstone, peritonitis, cancer of the stomach or liver, ascarides which force their way into the biliary passage.

SYMPTOMS.—Very pronounced jaundice, clay-colored excrement, swelling of the liver, etc.

TREATMENT.—At first the treatment must be one adapted to the original disease. In general, stimulating compresses, especially on the region of the liver are highly to be recommended, the same to be continued for a considerable time.

BILZ REFORM FOODS. The manufacturers of the *Bilz* reform food write: It has seldom happened that anything has celebrated such a world-wide triumph as the Natural Method of Healing, and never perhaps have men sacrificed themselves so thoroughly in a good cause as *Kneipp, Bilz* and others connected with this movement. Not only has *Bilz'* admirable book, "The Natural Method of Healing"—which has found its way into upwards of half a million of families—won the esteem and gratitude of suffering humanity, but he has also furthered the good cause of healing according to the laws of nature by directing his attention to natural food, the providing of which is as great in importance as light, air and water. That coffee is not suitable for the ailing, particularly for those suffering from diseases of the stomach, is well known to everybody; the best and most proper substitutes for coffee are cocoa, chocolate and malt coffee; however, most cocoas, particularly the so-called soluble ones, made in Holland and elsewhere, contain soda, potash, magnesia, and may therefore seriously affect the stomach.

A noteworthy exception to this is:

BILZ' REFORM COCOA, which being made of cocoa mixed with vegetable nutriment, extract of fruit and the best vegetables, is easily digested and highly nutritious.The salutary properties and advantages possessed by *Bilz'* reform cocoa are also found in

BILZ' REFORM CHOCOLATE, which is made on the same principles as the above and of the very best cocoa-nibs. It also contains vanilla and

sugar, as well as the above mentioned vegetable nutriment. It has an extremely beneficent effect on digestion; is therefore highly nutritious and preferable to all other chocolates.

In many families, and particularly in the *Bilz* Sanatorium in Radebeul, near Dresden, reform cocoa and chocolate are used mixed in equal parts. To meet the wishes of many consumers, this mixture is now made in the factory and sold under the name of BILZ' REFORM MELANGE.

BILZ' ALMOND MILK BISCUITS are made of the best materials, including a proper and agreeable proportion of almond milk, which is most nutritious and strengthening, and renders these biscuits not only agreeable to the taste but also highly valuable as an addition to the breakfast and tea-table; and being so wholesome and easily assimilated, they are particularly suitable for convalescents.

BILZ' ALMOND MILK INFANTS' FOOD is an excellent addition to cow's milk, rendering it digestible and nutritious for infants. The component parts are the same as those of the almond milk biscuits, but in the form of a powder, and in packets on which full directions for use are given.

BILZ' MALT COFFEE, in consequence of the peculiar process of manufacture, entirely supersedes ordinary coffee, and is not, like many other products, composed of noxious extracts. *Bilz'* malt coffee can also be used to advantage mixed with ordinary coffee beans, and should for hygienic reasons be used in every household. It is especially to be recommended for anæmic persons and for children. At the exhibitions in Baden-Baden, Vienna and Paris the highest awards and a gold medal were given to this artificial coffee. The sole manufacturers of *Bilz'* Malt Coffee are Messrs. *Hillmann & Kirchner*, Breslau.

All *Bilz'* Reform Foods are to be obtained in the most respectable grocery stores, drug stores, etc., or direct from the manufacturers, Messrs. *Jltz & Kludt*, Dresden, the sole licensed manufacturers.

Bilz Sanatorium, see Index.

Birth, Premature, see "WOMEN, DISEASES OF".

BLACK-BEETLES. Borax, and also arsenic-bloom are used for destroying them; the latter is best mixed with soot, etc., to guard against cases of poisoning, especially as arsenic-bloom resembles flour, and black-beetles are frequently found in bake-houses.

Blackberry Soup, see "DIET".

Black Cataract, see "EYE DISEASES".

BLACKHEADS arise from an obstruction in the sebaceous follicles, which are, in consequence, slightly distended and form a swelling. If this be pressed out, a maggot-shaped mass of fatty matter emerges. Blackheads are generally found in the skin of young people and in that of people who are not particularly cleanly. They appear mostly in the face, back and nape of the neck.

TREATMENT.—Daily attention to the skin and two to three steam-baths a week, followed by a full-pack and bath, or, instead of these, steam-baths in bed and frequent washing and baths, or wet rubbing of the whole body with massage. See also "ACNE." For Modes of Application, see Index.

Bladder, see "CHEST AND ABDOMINAL CAVITY, ORGANS OF THE."

Bladder, see Index.

BLADDER, CATARRH OF THE. Both the acute and the chronic forms are extremely painful, and treatment must never be delayed.

SYMPTOMS.—A symptom of the acute form is the perpetual desire to make water; the excretion of urine is often in drops and painful; the urine clear in the beginning, later clouded and containing mucus, frequently red-colored, and even containing blood; the region of the kidneys, urethra, sexual parts and anus being especially tender. This affection is often combined with fever; the course of the disease either extends over a few days (at the most two or three weeks), or it enters the chronic stage, lasting then for months or longer.

CHRONIC CATARRH OF THE BLADDER.—Exactly the same symptoms occur, but less violent and without fever, frequently also without pain. Always clouded urine, which, when cold, leaves a turbid sediment, consisting of many pus corpuscles and mucous cells. Suppuration and even perforation take place.

In worse cases, both acute and chronic, complete retention of the urine may supervene (in the former through the sphincter of the bladder being closed), also ulceration of the mucous membrane, abscesses, and, finally, danger to life.

CAUSES.—Getting cold in the feet or in the abdomen; eating pungent, irritating substances, drinking cold new beer, etc.; taking medicine which produces acrid matter in the urine, the consequence being irritation of the bladder and inflammation in some of the adjacent sexual parts; further, co-habitation, medically treated gonorrhœa, irritation from stone in the bladder, etc., and retention of urine for too long a time, etc.

TREATMENT.—Entirely non-stimulating diet, drinking water frequently when thirsty; pure air.

According to the patient's condition (104° to 110°) warm abdominal pads or compresses, from four to six-fold (duration fifteen minutes), or (77°) lukewarm abdominal packs (duration fifteen to thirty minutes), together with (72°) lukewarm calf-packs of from two to three hours' duration, also (72°) T bandages* if the patient likes them; bathing the abdomen (86°) from the anus to the navel (duration five to ten minutes) has a good effect.

Daily sponge bath of the whole body (72° to 82°) and one or two hip-baths (86° to 94°), duration of from ten to twenty-five minutes.

Also once a day (80°) lukewarm, stimulating full-pack (duration from one to one and a half hours) with (90°) lukewarm bath to follow, is suitable under certain conditions; or a steam-bath, twenty to twenty-five minutes, may be given, with wet pack (from a half to three-quarters of an hour) to follow, and finish with (90°) lukewarm bath, or (72°) lukewarm douche, the latter particularly gently applied to the affected parts. The whole process must be most carefully carried out to avoid any irritation.

With retention of urine, tapping is necessary in case the above treatment or the treatment indicated under "TAPPING" should not remove the disease. Perfect rest is necessary, in some cases regenerative treatment may be applied. If there is stone in the bladder, see IBID.

TREATMENT BY MASSAGE consists in gently pressing and rubbing the region of the bladder, but it must always be combined with the above treatment. (For Modes of Application, see Index.)

Massage is dangerous, and should not be applied so long as the inflammation is acute, that is, painful.

GONORRHOEA AND CATARRH OF THE BLADDER

Cured in the BILZ Sanatorium, Dresden.

Mr. F., of A., had suffered from gonorrhœa, which was temporarily suppressed by injections of acid and solution of caustic, but after a time the disease took a chronic form. Then daily discharges, burning pains in the urethra and painful micturition set in which resulted in severe mental depression. A renewal of the injections caused the discharge to take an inward direction and attack the bladder, causing a discharge of blood or pus.

The patient came in this sad condition to the Bilz Sanatorium. By the application of vapor-baths, warm hip-baths with cold affusions, local packs, T packs and two three-quarter-packs a week, combined with

* Applied to the lower part of the back in the shape of a T.

a strictly non-stimulating diet, the patient improved in the course of a few weeks, and after the lapse of five weeks he was able to leave the Sanatorium perfectly cured, nor has a relapse occurred.

How many such chronic sufferers could be cured if the Natural Method of Healing were soon enough properly applied! Not only in gonorrhœa, but in syphilis especially, most satisfactory results are attained by our natural treatment; and we would earnestly warn against the use of the dangerous treatment with mercurial ointments and injections, which only suppress the symptoms without curing the disease.

CURE OF CATARRH OF THE BLADDER.

(By Mr. Wunderlich, of Meerane.)

This Natural Healer writes that he has cured every one of the numerous sufferers from catarrh of the bladder who have been under his treatment in a relatively short time, very often within a week. The treatment consisted of a half-vapor-bath daily, followed by a bath (85°) and one hip-bath (76°) of twenty-five minutes' duration, plenty of fresh water being given to drink. See further cures under "Bladder, Spasm of the."

Bladder, Cancer of the, see "Cancer of the Kidneys" and "Cancer."

BLADDER, Hemorrhage of the. This must not be regarded as a separate disease, but as a symptom of various disorders of the bladder.

Symptoms.—Greater or smaller quantities of blood are discharged with the urine, attended with more or less pain and feeling of pressure in the region of the bladder. It is not easy, especially for an unprofessional man, to determine whether blood is really passed with urine or not. Urine thickly charged with urates, a symptom constantly met with in gout, rheumatism and bad colds, has frequently been erroneously regarded as containing blood.

Causes.—The cause of hemorrhage in the bladder is, in the great majority of cases, a severe catarrh of the bladder. The latter can arise from a cold or be transferred to the bladder from other organs, e. g. inflammation of the urethra, as in gonorrhœa, or of the kidneys may extend along the urethra or ureter, and affect the bladder. When the mucous membrane of the bladder is congested with blood in this manner, rupture of one or more of the small vessels may cause hemorrhage. The blood will then pass off with the urine. Growths in the bladder, especially cancer, also favor the occurrence of hemorrhage.

Treatment.—A steam-bath for the body of from ten to fifteen minutes' duration, succeeded by a hip-bath (88°) of from fifteen to twenty minutes' duration, should be given daily. Also compresses over the region of the bladder (68° to 70°), to be changed when warm. Derivative treatment may here be applied with advantage. For this purpose foot-baths of 95° and 66° should be given thrice alternately, lasting respectively three minutes and one minute, or in lieu of them a steam-bath for the feet (ten minutes) followed by a cold affusion over the knees and tights. At night a stimulating foot and calf-pack (73° to 77°) should be given and worn all night if possible. In very severe cases cool water must be injected into the bladder. This operation must of course only be performed by a competent professional man.

We add the following general directions: absolutely non-stimulating diet, drink restricted to water, lemonade and milk. Rest as much as possible in order that the inflammation may not spread further.

In severe cases, strengthening treatments should be resorted to. For Modes of Application, see Index.

Bladder, Inflammation of the, see "Catarrh of the Bladder."

BLADDER, Paralysis of the. This disease arises from the muscular fibres of the bladder becoming affected or paralyzed.

Symptoms.—There is either retention of urine or involuntary passing of it. In the former case the bladder expands to abnormal dimensions by the accumulation of urine. A constant dripping of the water then takes place. When the disease attains an advanced state, the patient hardly notices the dripping, and every sense of feeling in this respect disappears.

Causes.—Usually a sequence of another disease. Previous chronic gororrhœa, or an affection of the bladder that has been treated medically. (Expansion, suppuration, in some cases affection of the spinal cord.) In females it is caused by hard or severe labor.

Treatment.—First, have due regard to the causes, and apply a treatment accordingly. A daily steam-bath in bed (one and a half or two hours), succeeded by tapping or sponge bath of the whole body.

In light cases a daily (88° to 90°) lukewarm bath, with (81°) affusions of the abdomen and region of the bladder (ten to fifteen minutes), followed by vigorous friction and a (60°) hip-bath daily, for twelve minutes. Kneading and shaking of the region of the bladder, in females, internal and external massage of the bladder beginning at the vagina, which may also be carried out in a warm bath.

If the urine pass involuntarily, (54° to 66°) hip-baths, lasting from five to eight minutes to be applied, or the penis may be held in a

vessel filled with cold or cool water. This must be done three or four times a day. At night an abdominal bandage, moderately wrung out, to be removed at midnight.

Other points are non-stimulating diet and fresh air. When thirsty, drink fresh water, but only in moderation, in order not to overfill the bladder.

In some cases, daily (81°) lukewarm injections to be applied. Also (68°) lukewarm T packs are useful in this affection. (For Modes of Application, see Index.

For account of cure, see "BLADDER, SPASM OF THE."

PARALYSIS OF THE BLADDER.

Cured by a Natural Physician.

At a late hour on the evening of July 30th, 1890, I was requested to come immediately to Mrs. H., of L. Complying with the request, a picture of misery presented itself to me on entering the sickroom. The sick person, who had been in convulsion of pain for a quarter of an hour and was trembling all over, was lying in bed, surrounded by her weeping relatives. Examination proved that heart and pulse were scarcely perceptible, the skin being covered with clammy perspiration.

The abdomen was tight as a drum and distended to bursting, and the bladder could be felt like a hard ball. In spite of copious draits of parsley tea, the patient had not passed any water for a day and a half, and the bowels had not acted for four days. It was a case of severe paralysis of the bladder, instant relief was imperative, otherwise death would quickly ensue. The patient was given an enema (90°), about a pint, to relieve the bowels; it was at once effective. After this, two persons quickly rubbed the patient all over with hands dipped into cold water until her skin got red and the body regained its natural temperature. Consciousness returned, and the patient complained of fearful drawing pains from the bladder towards the back and down the legs. She was placed in a hip-bath (99°) and hot water gradually added until the temperature reached 108°. Legs, back and chest were rubbed for twenty minutes. In a short time the pains decreased, and the patient felt stronger, upon which I had her placed in the hip-bath and administered a powerful hip-affusion, two large cans full of water (60°) upon which water was passed freely and the danger was at an end. The subséquent treatment consisted of daily hip-baths (86°), abdominal packs at night, and the patient has not had a relapse. See also reports of cure under "BLADDER, SPASMS OF THE." See also "RETENTION OF URINE."

BLADDER, Spasm of the. The male sex is more subject to this disease than the female. It makes its appearance either independently, or as a secondary disease. Its course is generally short, but frequently changes into inflammation of the bladder.

SYMPTOMS.—Violent attacks of contracting pains in the region of the bladder, lasting at times for a minute or longer, the pains shooting in different directions. Pain is also felt at the same time in the muscles of the bladder, which are spasmodically contracted; which contraction causes either retention or passing of urine, which excretes in drops only. Pain and spasm sometimes extend to the adjoining sexual parts, as well as to the rectum and thighs. Excretion of the urine in drops during the attack. At times entire retention of urine. After the attack copious discharges. The water is clear.

CAUSES.—Disorders in the urinary or sexual organs, gravel (vesical calculus), acrid urine, irritated condition of the uterus, rectum, etc.; it may, however, have a purely nervous origin; moreover, by contracting cold, by sitting on the cold ground or stones, catching cold in the feet, emotion, drinking new beer or wine, and taking diuretic medicines.

TREATMENT.—When an attack occurs, steam compresses (twenty-five minutes) on the region of the bladder; after it, a (86°) lukewarm hip-bath (twenty minutes), kneading the abdomen; or two or three (92° to 99°) warm hip-baths (fifteen to eighteen minutes) which may be gradually increased in temperature; after that, vigorously drying the parts, or dry friction (a hip-bath should be taken, particularly when an attack occurs).

For the purpose of stimulating the skin and as a detergent measure, stimulating full or three-quarter pack, or a steam-bath in bed daily, with bath to follow, or, better still, a half steam-bath (twenty to thirty minutes), see IBID., till the patient is thoroughly warm or perspires (therefore according to patient's state) with bath succeeding. Exposure to change of temperature to be avoided, diet non-stimulating; do not drink too cold water; breathe pure air. If this disorder is a secondary disease, then a treatment bearing on the original disorder should be first applied. Where there is a tendency to relapse, invigorating treatment to be applied; in certain cases regenerative treatment. (For Modes of Application, see Index.)

CURE OF SPASM AND CATARRH OF THE BLADDER.

(In the BILZ Sanatorium, Dresden-Radebeul.)

Mr. A. K., of Berlin, 46 years of age, had had gonorrhœa in January, 1897, which the allopathic treatment, consisting of caustic injections, was supposed to have cured. In reality, however, the disease was

only driven in towards the bladder. After the treatment the patient was often seized with violent pains when passing water, and these sometimes culminated in the most excruciating spasms in the bladder. At times the muscles of the bladder were so contracted that not a drop of urine could be passed, and at other times so relaxed that water was passed involuntarily. On the 12th of August, 1897, the patient entered the sanatorium in the state described. The treatment adopted consisted in half-baths (86°) with affusions (72°) on the back, full steam-baths with cool hip-baths to follow, T packs at night and vegetarian diet. After five weeks' treatment not only was the catarrh of the bladder cured, but, what was of more importance to the patient, the difficulties in micturition and the dreadful spasms of the bladder did not return, and the patient left the sanatorium well and happy.

Bladder, Stone in the, see "STONE."

Bladder, Weakness of the, see "BLADDER, PARALYSIS OF THE" and "BED WETTING."

Bladder, Weakness of the, see "BLADDER, SPASM OF THE" and "BED WETTING."

Bladder-worm, see "TAPE-WORM."

BLEEDING should never be resorted to. It is a disastrous abuse by which the patient is only advanced a stage nearer death. Is it not most lamentable, indeed, that a medical man should even at this day think of healing by bleeding, when he wastes the blood (the vital element) unnecessarily? I implore every physician, for the welfare of his patients, to abstain from the practice.

Bleeders, see "HEMOPHILIA."

Bleeding at the nose, see Index.

Bleeding, How to stop, see "HEMORRHAGE."

Blindness, see "EYES, DISEASES OF THE."

Blisters, see "BURNS."

Blisters on the skin are caused by burns or scalds (see "BURNS") and also by frost.

Some diseases also cause blisters to form during the development of the diseases. See "PEMPHIGUS."

BLOOD. The blood consists of red and white corpuscles or globules (Fig. 65) and serum, as well as of febrin, etc.

The red globules are about 0.0007 of a millimetre in diameter; they are so numerous as to make the entire blood appear red. A grain of sand is about a million times larger in its cubical contents than a red globule. The white blood globules are far fewer in number, and have

the proportion of about one to four hundred, and are considerably larger. The serum is a very light yellow, somewhat viscid fluid. An adult has about fifteen to eighteen pounds of blood, and as at each expansion and contraction of the heart—which occur seventy-five times a minute in a healthy adult—about one-third of a pound of blood is absorbed and moved by the heart, it follows that 67,500 pounds of blood are propelled through the heart in its 4,500 beats every hour. Thus the entire quantity of the blood passes the heart about ninety to a hundred times every sixty minutes. See also "BLOOD, CIRCULATION OF THE".

The blood has a twofold task:

The Human Blood.



Fig. 65.

a) and b) full view, c) sectional view, d) lying close together like a pile of coins, e) and f) dried up globules.

1. It has to nourish and build up all the tissues of the body, and to supply them with oxygen; which task is performed by the arteries, for it is in these that the light red blood courses, impregnated with oxygen, water, albumen, fat, salt, sugar, iron, etc., for the nourishment of the body.

2. It has to convey back used up matter, such as products of combustion, refuse of tissue, etc.; in fact, all the dross which our recuperative system no longer requires; and to carry it to the excretive organs, lungs, skin, kidneys, liver, in order that they may eject it. This office is performed by the veins, containing, as is known, thick, dark-red blood, charged with carbonic acid.

In these processes of nutrition and excretion the capillary system plays the principal part, by conveying to the tissues all the nutritive substances and the oxygen of the arterial blood, whilst carrying to the veins all rejected, used-up tissue, and the carbonic acid. The capillary system, therefore, is the agent of the process of assimilation and nutrition.

BLOOD (thick or thin). The blood circulation of persons with thin blood may be likened to a bright, rapid stream; that of people with thick blood, on the other hand, to a sluggishly flowing stream, depositing all kinds of slime and filth in its course.

Thin, light blood is a guarantee of constant health; it carries with it a light and cheerful spirit, a happy mind, elevating ideas, serene, calm character, an elastic walk, contentment with one's lot, altogether domestic peace and happiness; thick blood, the reverse of all this. The former is attained by a simple, non-stimulating diet, much exercise in pure, open air, plenty of sunlight, full breathing, breathing gymnastics, sleeping with the window open, drinking fresh water, etc.

The thick blood, on the contrary, is engendered by indigestible, stimulating diet, eating much meat, drinking strong beer, brandy, coffee, tea; or much physicking, etc., taking little exercise, insufficient fresh air and sunlight, breathing superficially, etc.

Blood Corpuscles, see "BLOOD, CIRCULATION OF THE".

BLOOD, CIRCULATION OF THE. The heart, which is surrounded by an envelope of skin (called the pericardium), consists of two chambers (the right and the left), separated by a partition, as well as of two ante-chambers. It is situated in the lower left side of the cavity of the chest, between the lungs, and is the organ which effects and maintains the circulation of the blood.

In describing the circulation of the blood, let us begin with the lower left chamber (the left ventricle). It contracts and forces the arterial blood, which it contains, and which is bright-red and charged with oxygen, into the great artery of the body (the aorta), by which it is carried to the most remote parts of the body and into the minutest, finest blood vessels (the capillary vessels); here end the most delicate branches of the arteries, and out of them again spring the most delicate sources of the veins. On its way through the capillary vessels the original arterial bright-red blood, charged with oxygen, is changed into dark-red blood charged with carbonic acid (called venous blood, in contradistinction to the arterial blod), and is then carried back to the heart by the veins which gradually unite so as to form great trunks (this is usually called the greater circulation of the blood). By the contraction of the heart, the blood is now again forced through the pulmonary artery into the lungs. Here the blood,—which, by the circulation through the body, had become venous, dark colored, and carboniferous,—is purified, made again arterial and bright-red, and charged with oxygen; and now it flows through the pulmonary vein back to the heart (called the lesser circulation of the blood) in order to enter once more upon its course through the body, which is accomplished by the rhythmical contraction and expansion of the heart.

The so-called greater circulation, which carries the blood containing the oxygen through the arteries into the finest capillary vessels, and takes back through the veins the dark carboniferous blood to the heart, has,

DIAGRAM SHOWING THE CIRCULATION OF THE BLOOD.

The heart lies open to view in front, the arrows show the direction of the circulation, the dark tubes contain dark, the white tubes bright-red blood.

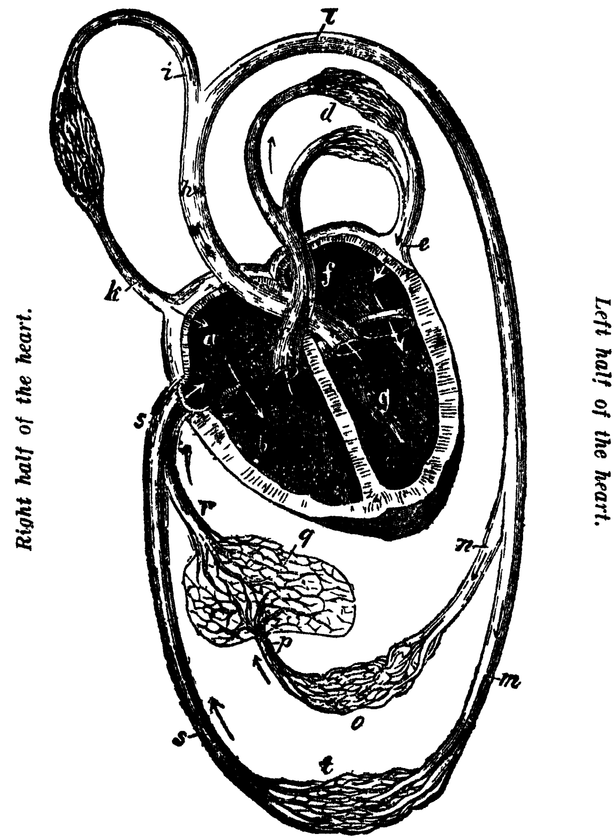


Fig. 66.

a) right auricle. b) right ventricle. c) pulmonary artery (antechamber). d) capillary vessels of the minor circulation in the lungs. e) pulmonary veins (four of them running into the left auricle. f) left auricle. g) left ventricle. h) great aorta. i) artery. k) vein (upper vena cava, of the upper half of the body). l) arch, and m) descending portion of the aorta. n) arteries of the abdominal viscera. o) capillary vessels of the intestinal canal. p) portal vein. q) capillaries of the portal vein in the liver. r) hepatic veins. s) lower vena cava, t) capillaries of the minor circulation.

DIAGRAM SHOWING THE BLOODVESSELS.

In Fig. 67 the most essential parts of the vascular system within the body are shown as if the body were transparent. The veins are dark, the arteries lighter.

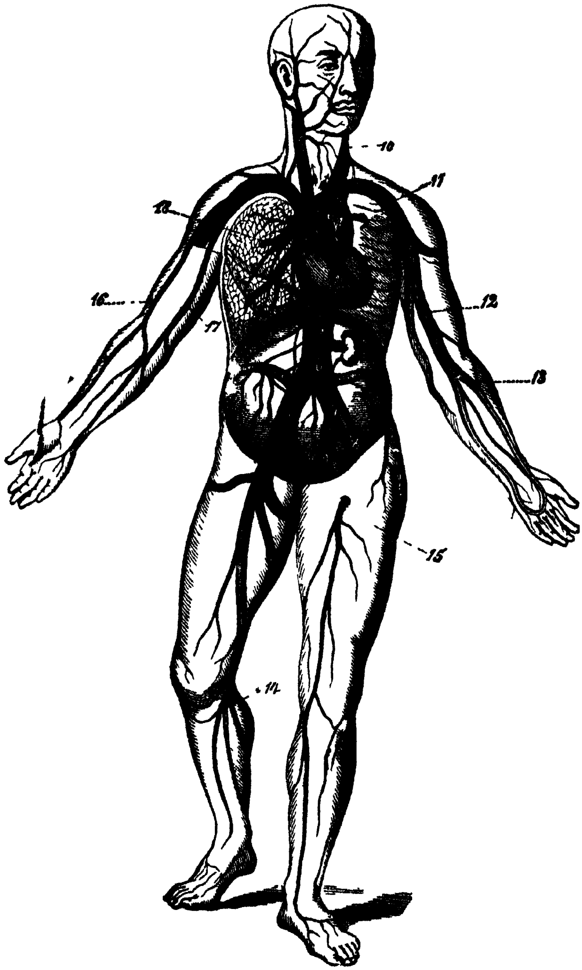


Fig. 67.

1) the heart. 2) pulmonary vein (carrying venal blood, branching out into two parts). 3) lower vena cava. 4) upper vena cava. 5) great aorta. 6) its division into the two iliac arteries. 7) division of the iliac artery. 8) iliac artery (represented perfect in the right leg). 9) internal iliac artery. 10) carotid artery. 11) subclavian artery. 12) brachial artery (omitted on the right arm). 13) its branching out into the radial artery (on the side of the thumb), and into the ulnar artery. 14) branching of the popliteal artery into the two tibial arteries and the perroneal artery. 15) great cutaneous vein of leg. 16) cephalic vein. 17) cephalic vein of elbow, joined in the flexor carpi of elbow by the median vein of fore-arm. 18) blood-vessels within the lung.

therefore, the task of supplying every organ and tissue of the body with proper nutritious fluid. The lesser circulation serves to change the dark-red venous blood, charged with carbon, into bright-red arterial blood, charged with oxygen; an office performed by the lungs, and for the purpose of which pure air particularly rich in oxygen, is essential. See also "ARTERIES" and "VEINS".

BLOOD, Circulation of the. A new doctrine of the motion of the blood and refutation of *Harvey's* theory.

Circulation of the Blood With Arteries Tied Up

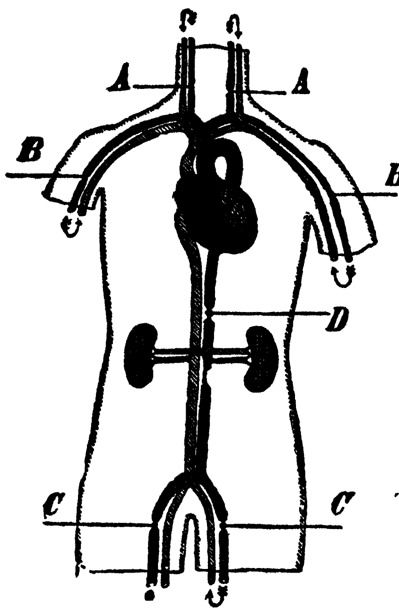


Fig. 68.

A. Tying of the carotid artery.
B. " " " brachial artery.
C. " " " femoral artery.
D. " " " abdominal aorta.

In the Berlin Industrial Exhibition an apparatus was exhibited by the firm of *Z. Reimann*, by the aid of which Dr. *Jezek* has been studying the circulation of the blood, and which led this investigator to the examination of the paradoxical question, whether the blood circulates at all. The apparatus had already been inspected by more than 1,000 physicians and investigators, and a confidential collaborateur of Dr. *Jezek* took this opportunity of explaining to them that the author of "Reform of human physiology," Dr. *Jezek*, after an unbiassed examination, has overthrown the old theory of the circulation of the blood.

As a proof of this new doctrine, we may mention that the experiment has been made of tying up some of the principal arteries, as shown in Fig. 68, the result being that in the arteries behind the ligatures the pulse failed, whereas it continued to heal in the part of the artery between the ligature and the heart, the conclusion being that the blood had not passed through the tied up places. In spite of this apparently dangerous and even incredible manipulation, no derangement was noticeable in the condition of the subject of the experiment. According to the well-known theory of Har-

vey and the physiologists of the old school, the blood is driven out of the left ventricle into the aorta and its ramifications. After it has passed through all the ramifying arteries, and reached the capillaries, it is suposed to pass into the veins and through the vena cava into the right auricle from the latter into the right ventricle, which sends it into the pulmonary arteries, and through their most delicate branches, the capillaries of the lungs. From the latter the blood is said to pass through the pulmonary veins into the left auricle, and thence into the left ventricle, where the course is begun again, as illustrated in Fig. 69.

Diagram of the Circulation of the Blood According to Harvey.

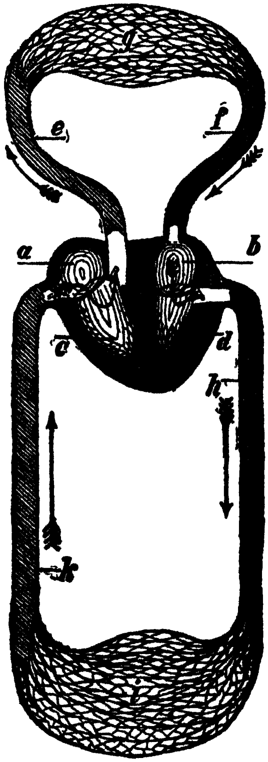


Fig. 69.

If this circulation is interrupted at any point, the consequence is vascular engorgement, with serious—indeed fatal consequences.

In point of fact, six prominent physiologists, on being interrogated by Dr. *Jezek*, have affirmed that an interruption of the blood circulation, such as would be produced by tying six of the principal arteries, ought to cause death; but, as we have seen above, this was not by any means the case.

The first deduction, viz., that there is no such thing as circulation at all, attained probability by experiment, and was also supported by the following proof.

First, the physiologist Frederici has shown by unimpeachable experiments that all arteries are sequestrated, i. e., are closed as if with a stopper; in fact, are blind alleys; and that the blood cannot pass from the arterial capillaries into the venous capillaries. Further, it has not infrequently been noticed that the aorta proceeds from both ventricles. In the museum of the College of Surgeons in Edinburgh is to be seen a specimen, in which the aorta, as well as the pulmonary artery, proceeds from the right ventricle. Another specimen shows them both proceeding from the left ventricle. In a third the pulmonary artery is absolutely wanting and there is an incomplete development of the septum, the aorta proceeding equally from both ventricles. The individual in question suffered from cyanosis (the blue disease) from his seventh year, but lived till the age of twenty. If we

consider all these facts, established as they have been by proof, we shall arrive at the deduction that the Harveyan theory, i. e., the hitherto adopted theory of the circulation of the blood, is false, for in the last case, for instance, where the pulmonary artery was wanting, there could no more be blood circulation than in the above mentioned experiments of Dr. *Jezek* in tying up the arteries. According to experience, the lungs dilate with each inspiration, and inside the dilated lung there prevails a higher, i. e., a positive pressure, which, after expiration, sinks under the atmospheric pressure. It has been repeatedly confirmed by manometers, and also proved by experiments on animals, that the internal pressure, when the lungs are at their greatest degree of dilation. is strong enough to press together the blood-vessels bedded in the lungs.

Dilated Pulmonary Vessels.

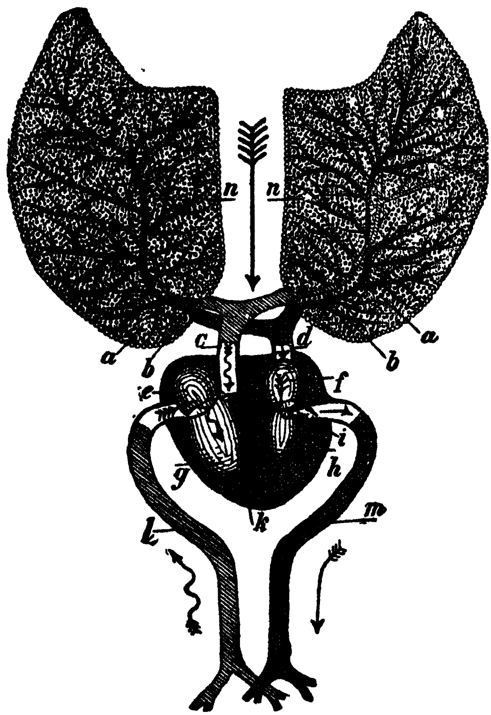


Fig. 70.

a) dilated pulmonary vesicles. b) pulmonary veins contracted. c) root of the pulmonary vein. e) right auricle. f) left auricle. g) right ventricle. h) left ventricle. i) open valve of the aorta. k) closed valve of the pulmonary artery. l) vena cava. m) aorta. n) pulmonary tissue.

Here lies the cardinal point of Dr. *Jezek's* discovery, for it is well known, from the respiratory fluctuations of the pressure of the blood, that the movement of the blood is influenced by breathing; yet, how the positive air pressure develops in the separate pulmonary vesicles at each inspiration overcomes the blood pressure in the pulmonary vessels and sets the blood in motion, had hitherto remained unknown. Numerous experiments and exact measurements have now shown that the elasticity of the pulmonary vesicles thus dilated by inspiration exercises a mean pressure of 1,318

kilogrammes on each square centimetre of dilated pulmonary vesicles. During the commencement of expansion (i. e., inspiration), the minimum blood pressure, in the same creature experimented upon was only 1,216 kilogrammes on the square centimetre. It is clear that if the higher elasticity of the pulmonary vesicles can overcome the blood pressure the blood-vessels are compressed and the blood flows to the heart.

Pulmonary Vessels Contracted.

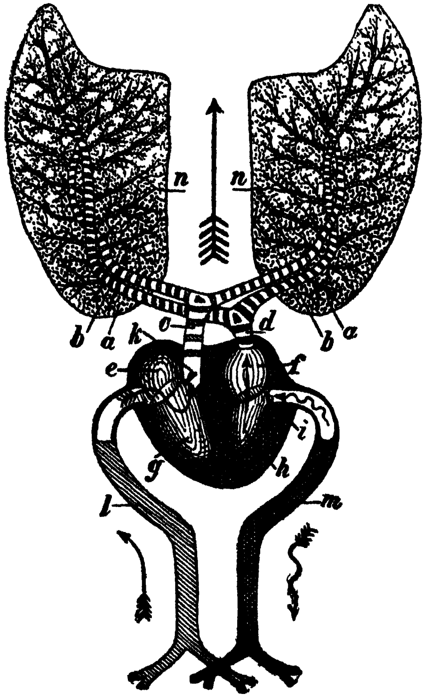


Fig. 71.

a) pulmonary vesicles contracted. b) pulmonary vein. c) root of the pulmonary artery. d) root of the pulmonary vein. e) right auricle. f) left auricle. g) right ventricle h) left ventricle. i) closed valve of the aorta. k) open valve of the pulmonary artery. l) vena cava. m) aorta. n) pulmonary tissue.

The blood is thus forced to the heart in the direction indicated by the arrows, Fig. 70, and so the valves of the pulmonary arteries are closed. The blood from the pulmonary artery cannot flow into the right side of the heart, but must force its way into the pulmonary tissue, through the wall of the artery. On the other hand, the blood in the pulmonary veins flows unobstructed into the left side of the heart.—But then the pressure in the left side of the heart rises to a maximum and opens the valve of the aorta so that the blood enters, under a strong pressure, into this artery and its branches. This purely mechanical process, however, only takes place during the phase of positive air pressure, for after expiration, this pressure in the lung-cells, as already emphasized, sinks down under the atmospheric pressure. While the air-pressure is in the act of sinking, the pulmonary vesicles contract and the previously contracted and so emptied blood-vessels can again dilate. Thereupon arises, however, in the so-called pulmonic circulation, a space void of blood, whilst a negative pressure, i. e., vacuum, results. On the other hand, the rest of the blood-vessels belonging to the circulation of the body are under the highest positive pressure, so that there is a great difference of pressure between the lung-vessels on the one hand, and the

rest of the blood-vessels on the other. This difference of pressure forces the blood into motion, so that it commences to move from the point of highest pressure to that of the lowest. Therefore, by the backward flowing arterial blood, the valve of the aorta becomes closed, and by the blood-stream from the veins the valve of the pulmonary artery opened.

After the valve of the aorta is closed, motion of the blood in the arterial system naturally ceases, but, on the other hand, after the opening of the valve of the pulmonary artery, the motion of the blood in the venous system is accelerated, so that the pulmonary arteries, which have become empty, are quickly filled with venous blood. At the same time the pulmonary veins fill with the arterial blood in the pulmonary tissue, to which is added the arterial blood from the left side of the heart streaming from the latter into the absorbing lung.

This physical process only takes place during the phase of negative air-pressure. After the pulmonary artery has been filled with venous, and the pulmonary veins with arterial blood, the positive air-pressure is again set up in the lung-cells as long as inspiration lasts. This forces the venous blood from the pulmonary artery into the pulmonary tissue, where it experiences a change, and forces the arterial blood from the pulmonary veins into the left side of the heart, and from these into the aorta. In the meanwhile expiration commences and the process just described is repeated. So the result of Dr. *Jezek's* experiments is as follows:—The cause of the motion of the blood does not lie in the heart but in the lungs; the blood does not circulate and does not flow equally in all districts, but streams backward and forward in the pulmonary veins, as the immediately preceding diagram clearly illustrates.

BLOOD, CONGESTION OF THE, is the term for an increased flow of the blood to certain parts of the body, especially the head.

TREATMENT.—A derivative treatment is to be applied to parts lying distant from that affected, also soothing or cool compresses on the affected place itself.

Thus, for example, congestion of blood to the head, is to be treated either by stimulating throat compress, abdominal compress, half or three-quarter packs on the feet or legs, or with foot steam-baths, half steam-baths, hip baths, etc., combined with continual soothnig or cool compresses on the head. If the cause be stagnation of the blood in the throat, caused by hard or swollen glands, tumors, scars, etc., frequent massage of the throat, stroking, kneading, rubbing, is to be applied to the affected parts. Frequent throat massage in acute congestions of blood to the head—combined, of course, with other derivative applications. See also "BLOOD, CONGESTION OF, IN KNEIPP CURE".

Throat massage is less applicable in chronic congestions.

For Modes of Applications, see Index.

Blood Corpuscles, see "BLOOD".

BLOOD, COUGHING, SPITTING OR VOMITING OF. Whenever blood is coughed up, it is always a sign that some greater or smaller blood-vessels have been ruptured. Most frequently the blood comes from the air passages of the lungs or from the stomach, and the cough is attended with a feeling of great anxiety, also with clammy perspiration, nausea, pallor, extreme exhaustion, in some cases even with fainting, wandering of the mind and convulsions. The blood from the lungs and air passages is bright red and foamy in appearance. That originating from the stomach is dark red, almost black, mingled with fragments of food and not foamy. The quantity of blood expectorated is sometimes only small, at other times as much as some quarts at a time; this is particularly the case in hemorrhage of the lungs; the attack often recurs two or three times a day for some time, sometimes only after an interval of several days.

Genuine Hemoptysis or coughing of blood, arising from rupture of a blood-vessel, often occurs quite suddenly; on the other hand, it is often heralded by a feeling of warmth and pressure behind the sternum. Although the loss of blood may be considerable and the attacks often repeated, yet death seldom ensues as the direct result of a rupture of a blood vessel.

CAUSES.—Hemorrhage of the lungs is a symptom of severe disorder of the lungs arising from destruction of pulmonary tissue, or extravasation of blood from a large artery, or from the mucous membrane of the broncheæ. If the bleeding be sudden and very considerable, it arises from rupture of a blood-vessel. Often, however, it is caused by the bursting of one of the small vessels of the trachea; this case is much less serious and need not cause any anxiety. In case of blood rising from the stomach, this may result from various diseases, as: scarlet fever, measles, smallpox, etc., also from tumor in the stomach, open gastric cancer (especially when large masses of matter resembling the sediment of coffee are ejected) also inflammation and congestion of the stomach, disorder of the heart, liver, spleen, etc.

Vomiting of blood, as distinguished from rupture of a blood-vessel, arises in most cases from the casting off of bleeding debris from the mucous membrane of the stomach, or from a round gastric tumour, in which case the blood is discharged either with the stools or by vomiting. Sometimes the bleeding originates in the gums or the nose, the blood finding its way thence into the throat. In these cases the bleeding can always be localized.

TREATMENT.—All tight clothing must be at once removed from the chest; the lungs must be spared and the action of the heart depressed as

much as possible, hence talking and mental excitement should be avoided; care should be taken that the patient does not breathe air loaded with dust or anything calculated to irritate the lungs.

The patient must remain perfectly quiet in bed, in pure, cool, but not cold air, and rather sitting than lying down, except in case of severe gastric hemorrhage, when his position should be horizontal. He must keep his mind as easy as possible. Then a stimulating leg-pack should be given, or a hot-water bottle covered with wet linen applied to the feet, or a steam-bath for the hands and feet combined with soothing chest- and neck-compresses, which should be well wetted and frequently changed. The temperature of the compresses should be respectively 77° (lukewarm) and 66° (cool). This treatment is to be continued till the bleeding ceases, then one or two lukewarm (77°—82°) hip-baths of fifteen to twenty-five minut[illegible] duration can be given daily and the neck compresses continued, the pat[illegible] being well rubbed and dried afterwards. In gastric hemorrhage coo[illegible] presses should be applied to the stomach, and cold water squirte[illegible] face in case of fainting. Food should be eaten cool, and [illegible] beverage. Enemata may be employed in case of constipa[illegible] ady be deeply seated a strengthenin[illegible] ould [illegible] cases of internal [illegible], where the blood, instead of being discha[illegible] from the body, finds its way into internal cavities or organs, e. g., into the spine or brain, soothing compresses as above should be applied, and the patient kept as quiet as possible. Should small unimportant vessels be broken, in consequence of a stra[illegible]in for instance, where extravasation of blood may take place and pain be felt, it will be sufficient to apply a stimulating compress.

See also "Hemorrhage of the Lungs". (For [illegible] Modes of Applicati[illegible] see Index.) See also articles "Breaking a Blood Vessel" and "He[illegible]orrhage" under Kneipp cure.

BLOOD-POISONING may be the result of vaccination, discharge of pus or matter in the body, uraemia, or the bite of poisonous reptiles, mad dogs, the sting of insects, cadaveric poison (absorbed at dissections), etc.

Symptoms.—Swelling, inflammation, and pains in the part first affected; with the increase of the swelling a fever appears, called suppurative fever.

Treatment.—See under the corresponding heads, as: Fever, Uraemia, Snake-Bite, Stings by Bees, Rabies or Hydrophobia, etc., and under the various poisonings, as: Poisoning, by Arsenic, Head Poisoning.

BLOOD, POVERTY OF (ANAEMIA). The female sex suffers more frequently from this disease than the male, three-fourths of all cases falling to the former. Poverty of blood is met with continually, especially in connection with the complaints to which the female sex is subject, and it is therefore mostly mentioned under its most prominent accompanying symptoms.

The main cause of poverty of blood is the lack of blood-forming food, and, in a great measure, also want of fresh air. It is caused in the female sex by loss of blood in miscarriages, irregular menstruation, application of leeches in catarrh of the uterus.

SYMPTOMS.—Pale or yellowish, cold, dried skin, pale yellow complexion. The red corpuscles in the blood also appear paler, and can diminish by one-sixth part in quantity. A slight chilly feeling, great lassitude, difficulty of breathing, and palpitation of the heart on the slightest exertion, headache, flickering before the eyes, noises in the ears. In di[illegible]ases, ice-cold skin, the face becomes pale blue, the nose pinched, [illegible]sent, blood is vomited, dropsy and fainting fits.

Either an independent serious disease of some of the organs or an insufficient supply of food, is the cause. Great loss of [illegible] [illegible]quent confinements, suckling too long, of blood at confinement, injuries, violent hemorrhages, vomiting of blood, bleeding at the nose, etc.

TREATMENT.—First remove the cause, if possible, and then, above all, take out-door exercise in pure air, sleep with the window open, and take non-stimulating, easily-digested food, particularly plenty of green vegetables, e. g., spinach, peas, carrots, asparagus, parsnips, green salad, and fruit. The patient should also take two soft-boiled eggs a day, and, in exceptional cases, also a small piece of roast meat, etc. As beverage, fruit juice and water [illegible] milk, etc. Then proper attention should be paid to the skin. Two very mild and short steam box-baths or foot steam-baths daily, followed by (86° to 92°) gentle sponge bath of the whole body, but this only if the steam-bath agrees with the patient; or, two short (88° to 94°) baths, with dry rubbing to follow, should be substituted, or (86° to 92°) lavations in bed. With patients who have some strength left, two or three stimulating (80°) three-quarter packs with hot-water bottle, wrapped in a wet cloth to the feet (one and a half to two hours); in fact, the lowest degrees given should always be chosen for vigorous patients. If it can be borne, a daily half steam-bath (30 minutes), with (88°) lukewarm bath and douche, as well as vigorous friction of the legs, may be substituted for the above treatment. Or, instead of this, a daily three-quarter steam-bath in bed (one to two hours) followed by a (72°) lukewarm rubbing with a wet towel of the whole body.

Above all, foot and hand steam-baths are excellent in promo mucous process of assimilation, which in poorness of blood and in green the large is always in an indifferent state. For patients who suffer from col Decided chilly subjects, full-baths as warm as can be comfortably borne art at the vised. An invigorating treatment may also with caution be introduced ient's

See also "WOMEN, DISEASES OF". tion

Treatment by massage, and curative gymnastics as with invigorating ed treatment. See also "CHLOROSIS". (For modes of Application see Index.)

POVERTY OF BLOOD AND GREEN SICKNESS.

(From "The Paradise of Health.")

I went to my miller's, Mr. H., the other morning, to pay for two sacks of coarse wheat-flour which I had bought. I found the family at breakfast. One of his daughters, a girl of 9 years of age, pale and thin, attracted my attention. She was drinking chocolate, of which a half-finished cup was before her; her roll lay crumbled beside her.

"You are a natural healer," said Mr. H., "can you tell me what would do this child good? She won't eat or drink, as you see. She has no mind for play, still less for learning. She is now in the hands of the third doctor, and no medicine does her any good." I asked: "What is the doctor doing for the child?" "He has ordered her some fresh sheep's blood." I could hardly believe my ears, and thought I had not heard aright. "What do you say, fresh sheep's blood! How is that possible?"

They all laughed, and Mr. H. remarked that this remedy was very common in the place; he was surprised I had not heard of it. "When does your daughter drink the blood?" "One of us goes every morning with her to the butcher's in town, who cuts off the head of a sheep and lets the blood run into a glass, which my child drinks off at once, and then we return home." "Oh, how horrible, how abominable! No, Mr. H., I could not have believed such a thing possible." "What are we to do? The doctor ders it, and he should surely know whether it is right." "But don't you n what condition your child is, in spite of it? That ought to teach have nothing to do with doctors. The child's own nature is its best mptest physician. You may engage half a dozen more doctors, of them will have different ideas, ascribe a different illness to the order different remedies. What did the second doctor try to "Oh, he ordered cod-liver oil, which she took for three or s." "What horrible stuff to swallow! Poor child, how they eated you, without procuring you any real relief! And the first what was his nostrum?" "The first doctor treated her for green

frequent and she had to take iron in pills for some time." "Ah, now I am to the ̓nished to see your daughter so weak and miserable. Iron, cod-connesil, sheep's blood!!! What a beautiful triad! And did the child is th the blood without disgust?" "The first few times it did not go down symly, but she takes a little brandy, or a small glass of sherry, directly after ." "Brandy! Well, I am astonished; one evil breeds another. And does your daughter look on with indifference when a sheep's throat is being cut, in order that she may drink its blood?"

"All that grows into habit; she sometimes chooses the sheep herself!" "Well, Mr. H .,I should not have believed a thing of this kind were possible; it is a very sad experience. It is dreadful to think how humanity suffers by the utter ignorance or the terrible idiocy of physicians, as well as by the humbug of quacks—and is kept in everlasting leading strings, and allows itself to be deceived and led astray by them."

"Well, you seem to be dead against any medical remedies; what do you, then, advise me to do?"

The mother's attention was arrested. I suggested a correct vegetarian, natural diet; next, a cool, short bath to be given every day, or at least every third day, to be succeeded every time by vigorous friction, and walking exercise afterwards; and, above all: no doctor.

My advice appeared feasible to Mrs. H. She said she had tried so many things, and the child's condition had only become worse with every fresh doctor, and they might as well try it for a month, and go to the mill and live there, four miles from town, in which I completely agreed with her.

Good results were certain. In a fortnight the child had a healthy complexion, played merrily with her brothers and sisters; and now, after six weeks' time, she is at school again.

CASE OF ANAEMIA AND CHLOROSIS

Cured in the Bilz Sanatorium, Dresden-Radebeul.

Mrs. S., of Z., aged 35, came under our treatment in the middle of October, 1897. She comes from a healthy family, was always in good health as a child, and developed rapidly, but was always anæmic. The only serious disease she had had was typhoid fever, but she had suffered from passing attacks of abscess of the stomach (very possibly in consequence of the poverty of blood). She had been married for 12 years, but had never had a normal delivery, having twice had a miscarriage in the third and fourth months respectively.

The lady, who was tall, strong and well developed, did not, at first sight, give the impression of illness. Examination, however, revealed

unmistakable symptoms of chronic anæmia; paleness in the mucous membrane, a scarcely perceptible pulse, and a rushing noise in the large vessels of the throat, frequently met with in anæmic people. Decided symptoms of general nervous weakness (neurasthenia) were present at the same time, especially considerably increased knee reflexes. The patient's feelings corresponded with these objective symptoms. The least exertion tired her and she constantly felt a desire for rest and sleep, and suffered from giddiness and headache (owing to the absence of blood in the brain) as well as from cold feet. In addition she complained of constipation, loss of spirits, and great excitability.

The treatment consisted at first in mild applications of water (lukewarm, shallow and hip-baths, bathing the feet, etc.) and as soon as improvement set in, these were gradually replaced by cooler applications (Kneipp's shallow-baths, short, cold local affusions, etc). Massage, gymnastics and open air exercise adapted to her strength were ordered at the same time, together with nourishing but non-stimulating diet. After being treated for six weeks, the patient's condition had so far improved that she was able to leave the establishment in renewed health and vigor, and resume her household duties after a long interval.

POVERTY OF BLOOD

Cured in the Bilz Sanatorium.

Mr. W., of Spandau, 31 years of age, comes of a healthy family, had measles, German measles and erysipelas, but otherwise has always enjoyed good health. For some years he suffered from constant diarrhœa, and since October, 1895, experienced a continuous loss of weight, accompanied by rumbling and gripes in the abdomen, weakness in the loins, dizziness in the head and cold hands and feet. His sleep was frequently disturbed by troublesome dreams. The army doctors who treated him attached most importance to the disorders of the stomach, and began a purely local treatment of the stomach for which all sorts of medicines were prescribed. Unfortunately they had no effect, even Carlsbad waters failing to stop his illness. The patient continued to lose strength, and the doctors were anxious to send him to a military hospital for further treatment. Dreading the hospital, and suspecting (probably not without good reason), that he would never leave the place alive, the patient declined to adopt this course, but, thanks to the intervention of a high official, who was a friend of his, obtained four weeks' leave of absence. Without a moment's delay, he started for Bilz's Sanatorium, and arrived there May 30th. He presented a sorry spectacle. His digestive organs were thoroughly weak-

ened, his hollow eyes and cheeks gave him the appearance of a man who was dangerously ill, suffering, one might say, from consumption in an advanced stage.

However, a thorough examination soon revealed the fact that the most important internal organs were sound, and that it was only a severe case of anæmia and nervous weakness; so there was no occasion to lose heart. First and foremost, it was necessary to purge the bad blood by a strengthening and blood-cleansing diet and also to ease the bowels by passing day and night in pure air containing plenty of ozone, by air baths and by the application of lukewarm water. The local treatment was limited as much as possible, and consisted of vapor-baths, followed by cool hip-baths, for the purpose of reviving the circulation of the blood in the abdomen. Even after a few days a surprising change was apparent in his condition. The stool was regular, no longer thin but firmly formed, while the patient's appetite increased to such an extent that he said he could eat like a ploughboy, and a proportionate increase in weight was observable. His appearance improved and in a month's time he was able to return perfectly cured.

We should mention here that few stomach complaints and disorders of digestion which originate partly in nervous ailments and partly in poverty of blood can be cured in such a short time as the above was. Very often it takes months, if they are at all curable, and the greatest patience on the part of the healer as well as of the patient is absolutely necessary, in order to bring about the desired relief or cure.

Blood, Excess of, see "HYPERÆMIA".

BLOOD-LETTING. It is effected by means of a lancet, leeches, or cupping; but, thank God, is being abandoned more and more generally by modern physicians since science has proved it to be a fact that any apparent advantage gained by bleeding is only a very transient one, while the injury inflicted is lasting. He who bleeds greatly prejudices life and health, as well as the prospect of curing the disease.

Periodical blood-letting, to which the system can become accustomed to such a degree as to require it from time to time, in order to prevent sickness, is highly objectionable. Even if the injury done by it is not at once palpable, yet its detrimental influence on the vitality of the whole system is sure to be felt in the long run.

In the Natural Method of Healing, bleeding is never necessary; we possess better means of obtaining the same result. We bring about a normal circulation of the blood and apply a detergent, soothing treatment, and order non-stimulating diet, which is far more effective than bleeding, and which cannot do any injury. See also: "PLETHORA".

BLOOD, Plethora of, are large injurious collections of blood in any given organ.

TREATMENT.—In general, very moderate, mixed, or non-stimulating diet, particularly invalid's diet; drinking fresh water when thirsty, plenty of fresh air, sleeping with the window open. Moreover, plenty of gentle exercise, occasional stimulating full-packs or steam-baths in bed, followed by (88°) lukewarm bath, or (77°) lukewarm wet rubbing of the whole body, and every night an abdominal compress. If congestion of the brain, of the spinal marrow, the lungs, liver, or spleen, etc., has taken place, proceed detergently—i. e., give stimulating packs on legs or feet, hip-baths, half or foot steam-baths; also put cooling compresses on the affected part. Stimulating three-quarter or half packs would do well instead of these. Small lukewarm enemata, three to six, as a detergent measure, and ampler ones for constipation.

TREATMENT BY MASSAGE consists here especially of derivative massage, above all kneading the arms and legs vigorously.

(For Modes of Application see Index.)

BLOOD, Temperature of the. The normal, regular temperature of a healthy person is on the average 98°, or rather according to the time of the day, between 98° and 100°.

Blood, Spitting of, see "BLOOD."

Blood, Vomiting of, see "BLOOD."

Blotches, see "PIMPLES."

Blotches, see Index.

Blueberry, see Index.

Blueberry Soup, see Index.

Blue Disease, see "CYANOSIS."

Body, Massage of the, see "MASSAGE OF THE WHOLE BODY."

BODY, Temperature of the. The normal temperature of the human body is 100° F. (= 30° R. = 37½° C.). Dr. *Walser* writes as follows on this subject:

The heat of the body has its origin in the chemical and physical process of change of tissue and is, in the case of man and many animals, independent of external temperature, remaining unaffected by the changes which take place in the latter. It is produced principally in the glands and muscles; this fact can be proved directly by muscular work, which is able to raise the temperature of the body 2°. It is subject to a

certain amount of fluctuation during the course of the day, corresponding to the reception of nourishment and the alternations of exercise and repose. It rises slowly from seven in the morning till four in the afternoon, when it reaches its highest point which it maintains until nine in the evening, when it falls again. Heat is not produced uniformly in every part of the body; it depends principally on the change of tissue, and is evolved during the process of the conversion of the food in our bodies by oxidation into carbonic acid, water, and urea. This process is carried on with greatest vigor in the places where the muscles are in active movement; the latter then furnish a superabundance of heat. The heat thus produced is distributed through the body by the blood, being carried in this manner to those parts which do not produce any warmth themselves. These latter, however, are always at a disadvantage, as is shown by the cold feet of those leading sedentary lives, since the heat of the body results from the process of oxidation, and this process takes place in the muscles.

In opposition to this process of production of heat stands the consumption of heat when the body is in an environment of different temperature. Warmth disappears in the first place through radiation, when the surrounding air is cooler than the body, the loss being in direct proportion to the difference in the temperature, in the second place through conduction, the heat being transferred to a cooler body in contact with our own, and lastly, through operation of the moisture on the skin. *Helmholtz* estimates that 15% of the total loss of heat is due to the last named cause; about 5% is given off through the lungs.

This loss of heat is restored by nourishment, and in estimating the comparative importance of different articles of food we have to consider their value in this respect. By a unit of heat we mean, as we have already explained, the amount of heat necessary to raise the temperature of one kilogram of water one degree R., and by experiment we find that albumen possesses 5.7, starch 4.2, and fat 9.5 units. Albumen, however, does not develop its total heat producing power; only about 4.5 units are available, as a portion of it passes away from the body unconsumed, being changed into urea.

In order to maintain the same temperature, the body must be furnished with means enabling it to adapt itself to the external temperature; it must have the power to replace a loss, as well as to get rid of a superabundance of heat. The former object is effected by the consumption of food; this is shown by the fact that our appetite is keener in winter than in summer; a second means to the same end is muscular exercise. A person sitting or standing will feel cold in a room which appears warm to a man hard at work in it. The body, moreover, adapts itself spontaneously to

cold in the following manner:—In consequence of the irritation communicated by cold to the skin, the body is stimulated to the production of heat, and an increased supply of blood is directed to the skin, whereby its loss of heat is made good. This increase in the supply of blood is rendered possible by the property of expansion and contraction possessed by the arteries. The latter are stimulated to employ this power by the spontaneous action of certain nerves. When the temperature of the body rises the arteries of the skin expand, thus permitting the blood to cool more rapidly; when the temperature falls, they contract, thereby preventing further cooling. Again, a high temperature promotes perspiration, by the evaporation of which heat gets abstracted from the body. Lastly, we protect ourselves by clothing, wearing thicker or thinner garments, as the external temperature requires; making use also of the difference between white and black for this object.

We see, therefore, that the physical processes of heat are continually at work in and around us, and that it is by no means valueless to gain a closer acquaintance with them, little as they may seem at first sight to have to do with the subject of health.

Boils, see "ABSCESS."

BOIL (Furuncle). This is an inflammation of the cellular tissue, the hair follicles or the sebaceous gland, which is very common especially with young people. Boils appear chiefly on the thighs, seat, abdomen, and neck, however, they are sometimes met with on other parts.

SYMPTOMS.—Roughness and redness of the skin gradually developing into a swelling which has a perceptible point, and is hard, tightly drawn, and very painful—at times of a throbbing nature.

After the lapse of a longer or shorter period (if treated by our method, in a few days) it comes to a head, and looks as if there were a core in the boil; this is the destroyed follicle which is undermined and expelled by pus or matter, after this has taken place, the wound quickly heals. However, a reddened protuberance or scar remains for some little time.

CAUSES.—Irritation of the skin, such as violent scratching. Impurity or acidity of the blood in consequence of highly seasoned food and stimulants, medicine, etc., contact with animal matter in a state of decomposition.

TREATMENT.—In the early stage the boil should be kneaded, after which soothing and softening compresses should be applied. For this purpose rough linen cloth, folded several times, may be used. It is wrung out—not very dry—in water 64° to 77° and laid on the place and well covered with flannel. The compress is left on for several hours or throughout

the night; when it gets dry or troublesome or causes pain, it should be removed. The compresses are to be continued till the boil opens (see also "STIMULATING COMPRESSES"). Boils treated in this manner open of themselves as a rule, upon which stimulating compresses (77°) are applied. An 18° sponge bath of the whole body should be given daily, and, where feasible, lukewarm baths with affusion or dropping of water on the affected part should be adopted. Also gentle syringing of the boil.

In more severe cases a series of six to eight steam compresses should be laid on the boil two or three times a day, in order to bring it to a head quickly, and then a few stimulating full packs or steam-baths in bed with extra compresses on the boil are necessary, these to be followed by wet rubbing of the whole body. Non-stimulating diet and fresh air are essential. (For Modes of Application see Index.) Respecting cutting or opening a boil see "ULCERS" and "BAD HEALTH," also KNEIPP CURE of boil, "CARBUNCLE," and reports of cures under "ULCERS."

BONES, FRACTURE OF, may be caused by any force, capable of destroying the cohesion of the different parts, and may be the result of a fall, push, jamming, or injuries of other kinds, etc. The long bones break most easily; the round bones are not easily broken. Bones situated near the surface break much more easily than those more protected from violence by a thicker covering of flesh, etc. The nature of fractures varies considerably, according to the force employed and other circumstances. They are distinguished as simple, compound, comminuted, transverse, oblique, double, treble, displaced, nondisplaced, green-stick, complete, recent, and neglected fractures.

DESCRIPTION.—A feeling of friction, which the sufferer experiences at every attempt at movement. If the bone is broken completely, it is impossible to move the limb. Moreover, the broken ends take up an altered position towards each other, changing, in consequence, the external shape of the fractured part. This altered appearance is most apparent in the upper and lower extremities. When by the shifting of the bone its former axis has changed, the limb has undergone a lateral displacement; if the broken end is raised up, and the lower end has shifted in a lateral position, a considerable shortening and thickening (swelling) occurs at the place of fracture (swelling at the part of the fractured bone may also be caused by extravasated masses of blood). At the injured spot there is either a depression—that is, the fissure between the two broken ends—or else a sharp edge or point is observable (Figs. 119 and 120); this is the end of the fractured bone. If both ends be seized with the hands, they can be pushed into different directions, a thing impossible with an uninjured bone.

The end of such a broken bone may pierce the skin and become visible; in the same way splinters of bone may lie exposed in wounds by crushing.

View of a Broken Leg, by Dr. Ruff.

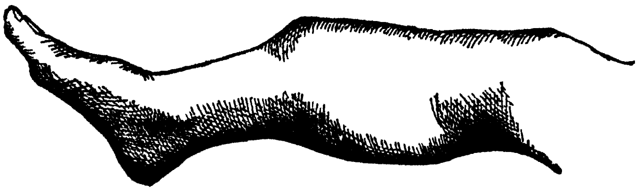


Fig. 72.

In simple fractures, the altered position of the broken ends is only slight, but the swelling around the fracture is considerable. It is rather difficult to distinguish these fractures; even physicians and surgeons often have difficulty in doing so. The principal indication of fracture is the grating noise caused by the friction of the two ends against each other.

View of a Leg with Fractured Bone, Laid Open, by Dr. Ruff.

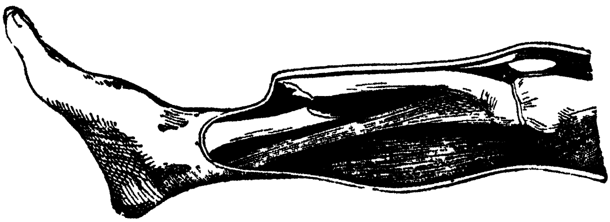


Fig. 73.

On rubbing them together, a scraping or creaking noise is distinctly heard, as of two pieces of sugar being grated together. Above all, the pain which the patient experiences, and the subsequent inflammation and swelling near the fracturé, are the surest guides.

It heals by the fractured ends exuding new, soft osseous substance, filling any interstice, and bringing about their agglutination without any sign of suppuration. This substance (callus), fluid in the beginning, gradually grows denser, till at last it is hard and firm. A broken limb that has healed must therefore be treated carefully for a time, say six months.

TREATMENT.—Two things have mainly to be kept in view:—The most exact union possible of the two fractured ends, and their lasting re-

tention in that position, providing it corresponds in every respect with the normal position.

In cases, where no displacement of the ends has occurred, simply putting the bones into splints is sufficient; in complicated, difficult cases, however, a firmer bandage is necessary to prevent imperfect agglutination with shortening of the bone, etc. These compound fractures heal, of course, much more tardily.

Having first removed the garments from the fractured limb (by cutting them away or undoing the seams), the first thing to do is to put the patient—or, rather, the broken limb—in a proper position, best on a sack filled with chaff, because it allows of a hollow being made in it corresponding with the fractured part. But feather cushions, bags filled with sand, wire-work, etc., may also be utilized for the same purpose. The bone is then set, which only a competent man must perform.

In cases of broken ribs, it is best to place the patient on a mattress or bed, which prevents any further flexion; for the perfect healing process, and therefore a favorable result, depends in a great measure on a proper adjustment of the broken ends. In every fracture, therefore, it is of paramount importance to get the two fractured ends in their original position; for which purpose a second person is required, who holds the end which lies in its correct position, while the first adjusts the part that has been shifted or bent, and puts it into its natural place. The fractured place is then loosely bound, three or four times round, with a wet bandage, six inches wide, not too tightly, because of the swelling which supervenes. Over this bandage, two or three well-fitting splints, made of thin wood or sufficiently strong paste-board, are fixed with tapes. Over them a threefold layer of wet linen and wadding, and a flannel bandage as a final covering. The patient is then warmly wrapped up and allowed to rest, but not allowed to move the fractured part. If he feels too warm, the bandage is removed as far as the splints, a cold wet linen covering is put round the whole, whilst the first covering is washed and dried. The wet bandage lying beneath the splints may remain on for three or four days, and may be moistened during that time, or dabbed with a wet sponge, if the patient finds it too dry. That too, however, is changed in the course of three or four days, and the fractured place is closely examined. This proceeding is repeated, till the fracture heals. See also respecting amputation, "WOUNDS AND THEIR TREATMENT."

As far as possible the diet should be non-stimulating; fresh air, and careful attention to the skin must be given, as they greatly favor the heal-

ing process. If the bandage cannot be put on speedily, cold compresses, to ward off inflammation, are beneficial. See also "BROKEN ARM."

Dr. *Werner* writes on treatment with massage:

"The object of the doctor, in employing massage in simple fractures, is to withdraw blood that has collected at the fractured place and its surrounding parts, and to cause its absorption by stroking, so as to enable

Temporary Bandage for a Broken Thigh.

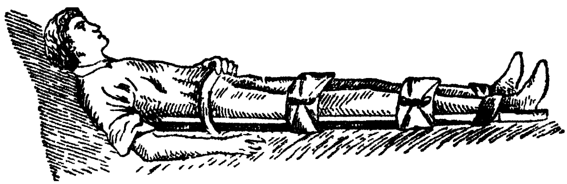


Fig. 74.

the fractured ends to unite closely and neatly. Not till then should the ends be rigidly fixed by immovable bandages, and left on till a firm union is effected. When that has taken place, massage is once more resorted to, to prevent any possible stiffness in the joint, and both active and passive

Simple Splint Attached to a Broken Leg, Recommended by Dr. Ruff.

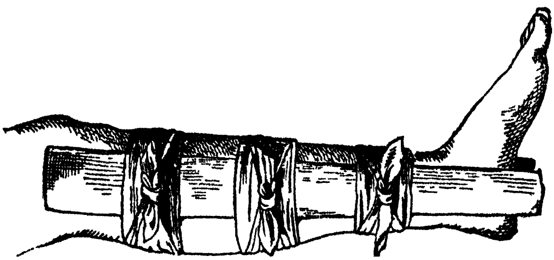


Fig. 75.

curative gymnastic movements should be performed. When the bandage is no longer necessary, massage in the form of gentle stroking may be applied. After that, gentle kneading and soft tapping, and, finally, cautiously performed passive and active movements are gone through."

As, in fracture of bones, the first aid (which may influence for good or evil the subsequent healing process) generally comes from untutored hands, the necessary hints for making a temporary bandage are here given. Take two pieces of wood, light poles, posts, hoe or broom sticks, etc. In fractures of the leg these pieces of wood must reach to the knee, in those of the thigh the inside piece must extend as far as the abdomen, and the outside one right up to the armpit.

These pieces of wood are placed against the outside and inside of the legs, with pads of folded handkerchiefs or cloths or plaited straw, and are then securely tied with handkerchiefs or cord. Both thighs and legs are tied together (at about three different places), and the upper end of the long splint is tied to the body. (Fig. 74.)

It is advantageous if, in taking up and removing the patient, the broken leg is placed on a board the length of the whole leg, and is loosely tied there. This also is a kind of improvised bandage.

Dr. *Ruff* gives directions how to make a simple temporary bandage in the following manner:—Take two laths, thin poles, hoe or broom sticks, the length of the broken bone; lay them on the outer edges of a cloth folded several times—any sufficiently stout material, plaited straw, even a workman's blouse, may be used—roll them over with the cloth around them till they approach each other near enough to leave just sufficient space between them for the broken limb to fit in. The cloth is fixed to the laths with cord, or it may be nailed on. A groove is thus formed as a soft support with rigid edges. (Fig. 76.) This is then pushed slowly under the injured bone—which should be taken up by a second assistant, very carefully and gently, a little below the fractured place, and raised exactly at the moment when the other person pushes the appliance underneath. When this is done, and two more splints have been tied with cord to the sides of the fractured bone, the patient will not experience any pain worth speaking of, after he has been placed on the stretcher, and a displacement of the broken ends will be impossible.

Improvised Bandage, Invented by Dr. Ruff.



Fig. 76.

In fractures of the upper or of the forearm, splints made of flat pieces of wood, bark of trees, and the like, are sufficient; they are lined with foliage, straw, grass, etc., and tied with handkerchiefs or cord.

A broken forearm is generally put in a sling made of a large handkerchief or neckerchief, folded so that it forms three corners, and so that the arm can quietly rest in it. Even inexperienced people can do this. (Fig. 77.)

Simple Bandage (temporary) for a Broken Upper- or Forearm.



Fig. 77.

Not until this temporary bandage has been put on can the sufferer be placed on a stretcher, and that must be done very gently and cautiously, in order to avoid not only great pain, but also a dangerous displacement of the fractured bone. (Fig. 78.) The stretcher may consist of a short ladder, door, vehicle, sledge, etc., or sacks of straw or mattresses. The broken bone must, during the transport, be kept in a quiet position.

Children with broken thighs or legs, after having a temporary bandage put on, can easily be carried home by an adult person.

The improvised bandages described above become particularly necessary when the accident happens in the open fields, or in a wood by the fall of branches, stones, etc., and when the sufferer has to be carried a long distance. Such a bandage is exchanged, when the home or other refuge is reached, for a bandage, with proper splints, put on by an expert.

Improvised Stretcher, Recommended by Dr. Ruff.

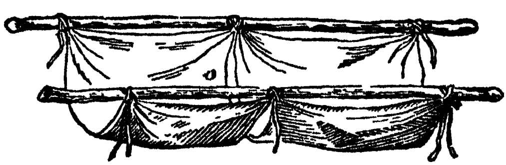


Fig. 78.

If there are no other means of transport at hand, the sufferer may be taken home on this improvised stretcher.

If neither a stretcher nor a carriage can be had, four people are generally required for the safe lifting and transport of a person with a
tured leg. Of these two keep the limb in an even, quiet
the other two support the body of the sufferer in a
their hands being placed under his back and

clasping each of their necks. If only two helpers are available, they must carry the injured man on their crossed hands, chair-fashion, while his arms clasp their necks. If a chair can be obtained, so much the better. In case of need, where only one helper is at hand, all he can do is to carry off the sufferer on his back with the legs hanging loose. Sometimes it may happen that no one is present to help, and that the injured man has to drag himself away some distance. He will best accomplish this by sitting on the ground, moving backwards, and, with the help of his arms and the uninjured leg, dragging the other leg after him.

CASE OF A FRACTURED ARM HEALED.

(By Mr. OTTO WAGNER, Director of the BILZ Sanatorium, Radebeul-Dresden.)

On October 31st, 1894, my second son, fourteen years of age, was thrown while wrestling, and had the misfortune to break his left arm at the elbow joint. The fracture was at the head of the forearm, a most dangerous place. We asked Mr. *Wagner*, director of the *Bilz* Sanatorium, who was at the time in Leisnig, engaged in practising the Natural Method of Healing, to treat the case. He kindly consented and, after infinite trouble, succeeded in putting the forearm, the head of which had been completely broken out of the joint, back into its proper place; he applied thick, cool compresses, and set the limb with light cardboard splints. The bandages were removed daily for the first fortnight, in order to renew the cool compresses, and when the pain was very great, hot compresses were applied, followed by cool bathing. In the meantime the patient was enjoined to carry out certain finger exercises, in strict accordance with directions, in order to keep up the circulation. At the end of the first two weeks careful massage and gymnastics with the arm, turning and resisting movements, etc., were employed; and at the end of six weeks the arm was perfectly straight, and could be moved at the joint just as readily as the right one, without causing any pain. We are all the more grateful to Mr. *Wagner*, because my eldest son, a lad of sixteen years, had a similar accident, which had resulted in a stiff and very weak arm. Although a qualified medical practitioner was on that occasion called in at once, he did not succeed in getting the elbow into joint again, but put it into plaster of Paris and ice bags, causing my boy intense pain. We are convinced that this and the ultimate result of a crippled limb would have been avoided, if we had had the advice and assistance of a doctor practis-the Natural Method of Healing. I publish this for the benefit of pieces of wo
foliage, straw, gherg, Leisnig.

N. MUENCH.

BONES, Hardening of the. (Osteosclerosis.) This disease is difficult to distinguish during lifetime, and occurs after chronic inflammations, in which the bones thicken in their joints and become as hard as ivory. The shape and size of the bones also undergo a change by the new formation of bone.

TREATMENT.—Strengthening treatment, see Index.

BONE, Inflammation and Mortification of, see "NECROSIS."

BONE, Ulceration of, see "CARIES."

BONES, Softening of the. (Osteomalacia.) This complaint mostly affects elderly persons, also pregnant and lying-in women, and arises from a faulty formation of cartilage and bone, or from the blood, generally therefore to be met with in constitutional complaints.

The hard constituent parts of the bones (the cortex) are absorbed, the bone becomes soft, pliable, and assumes the most various shapes. The vertebrae and the long parts of the spine generally get affected, the skull-bones and those of the limbs remaining intact.

TREATMENT.—Strengthening treatment, to be rigidly carried out.

To promote the action of the skin a steam-bath in bed or stimulating full-pack succeeded by tepid (73°—77°) sponge bath of the whole body or lukewarm (88°) bath should be given once a day or four times a week, if sufficient vital force remains.

If the strengthening treatment should prove unavailing, a regenerative or preliminary treatment should be taken in hand, provided the patient has the requisite strength to undergo it. Weakly patients are unfit for it, at least when strictly enforced, and have to be first strengthened by a strengthening treatment lasting for some time.

As change of matter (nutrition) takes place considerably more slowly in the tissue of bones than in other parts, diseases in the former take more time to develop and consequently also to heal, than in other places.

For softening of the bones in children see "RICKETTS."

TREATMENT.—With massage, the same as in strengthening treatment. (For Modes of Application see Index.)

BOTTLE-NOSE (raspberry-nose). Through excessive indulgence in brandy and spirituous liquors, especially when leading a sedentary mode of life, or through having to bend forward continually the capillary blood-vessels of the nose may expand, and cause it to assume a knob-like form and a bluish-red color, when it is known by the name of bottle or [illegible] nose. Without excess in drinking being the cause, however [illegible] in both sexes, especially in women, at an advanced [illegible] may even be caused by frost bite.

Treatment.—Everything to be avoided that causes a determination of the blood to the head, as great heat, excessive cold, exciting the mind, all kinds of spirituous liquors, such as brandy, strong wines, beer, strong coffee, tea, etc., highly seasoned food, a derivative treatment to be applied and the action of the skin to be attended to, take plenty of exercise, not sitting too much, do not take food too warm. At night stimulating (72°) abdominal, neck and calf packs, daily several (82°—85°) trunk baths, also occasional steam-baths for the head and the whole body. Walking in water and *Kneipp's* douche for face and throat compress.

Also treatment of the nose with the constant galvanic current has proved successful in many cases. If the complaint is of old standing, so that the blood-vessels have lost their powers of contraction, it is no longer removable. For Modes of Application see Index. See also *Kneipp* cure for bottle-nose. Nearly the same symptoms occur in copper-nose, except that the cutaneous inflammation often extends to the cheeks, forehead, and throat; spots, knots, and pustules are also to be found on them. Treatment as above.

BOTTLES, Hot Water, are frequently employed in lieu of steam-compresses, because they give less trouble and retain the heat longer. By the term hot water bottles, steam-bottles, or steam-jars, are generally understood one or two stone beer bottles, or the usual hot water bottles are generally used for the feet and stone jars for the legs. They are first put into an oven to get warmed through, and are then filled with hot water and well corked, with a cloth tied over the cork to secure it properly.

When once corked, the bottle must not be put on the stove or in the hot oven again, for it will burst. A towel or flannel wrung out in hot water is then put round the bottle (the towel, etc., is generally wrung out under another dry one, so as to prevent scalding the hands), and, if suitable, a stocking can be pulled over the whole, or they may be wrapped in flannel, and laid at the patient's feet or legs, etc. (as directed under steam-bath in bed, foot steam-bath in bed, and simple foot steam-bath, etc.).

In violent fever, delirium, and determination of blood to the head, the steam-bottles must only be left at the feet, till the latter are well warm, when they must be removed, in order to prevent the heat striking upwards. When the bottles are taken away from the feet, they must be rubbed with cool (67°) water, after which a stimulating foot and leg-pack (67°—73°) may be applied. While the steam-bottles are lying at the feet, towel wrung out in cold water is usually put round the patient's pieces of w[illegible]shion, or it is folded length-ways, placed under his head and foliage, straw, [illegible]sides; when it gets warm, it must be renewed, or the [illegible]ooling the head is to be carried out, especially

with fever, delirium, and determination of blood to the head. See also "FOOTWARMERS."

Bowels, see "INTESTINE."

Bowels, Inflammation of, see "INTESTINAL CATARRH."

BRAIN, THE (Figs. 79—81), is a grayish-white, soft substance, situated in the skull, and filling nearly the whole cavity. The weight of the brain is on an average 1,400 to 1,500 grammes, somewhat less in the female sex.

A distinction is made between the *Cerebrum* and *Cerebellum.*

The former is divided by a longitudinal fissure into two equal lateral halves, called hemispheres, joined together inferiorly by two bundles of fibre of moderate strength.

The *Cerebellum,* also consisting of two lobes, lies at the back and base of the skull, under the back part of the *Cerebrum.* Close by is the medulla oblongata (oblong marrow), the club-shaped upper extremity of the spinal cord.

The spinal cord, which joins here, and extends down to the region of the loins, may be regarded as the continuation of the brain.

The skein-like bundles of nerves which turn downwards are called CAUDA EQUINA.

Cerebrum and Cerebellum, Spinal Cord and Nerves, Respectively the Entire Nervous System, According to Dr. Hopf.

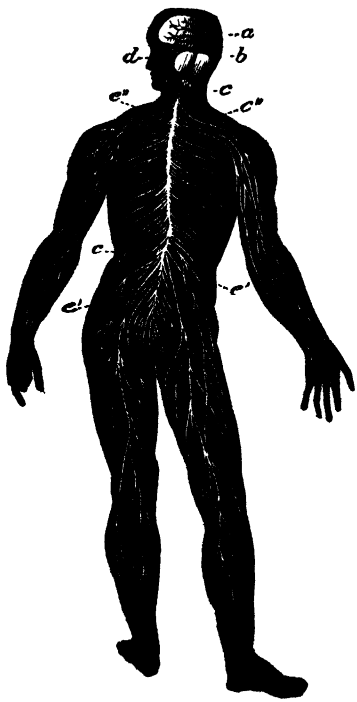


Fig. 79.

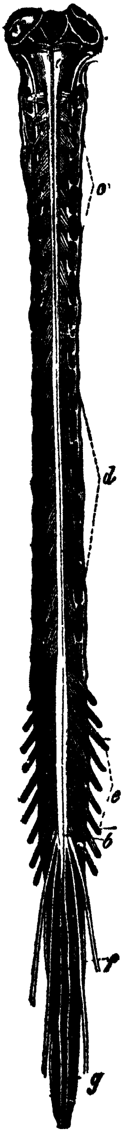
a) cerebrum. b) cerebellum. c) spinal cord. d) cerebral nerves. e) spinal nerves. e′ e″) nervous plexus from the rise of the great nerve-trunks (gh), branching out to the limbs. (See also under "NERVES".)

The cerebral and cranium nerves (Fig. 85), appearing at the lower part of the brain, and spreading mostly over head and neck, consist of twelve pairs of nerves.

The first cerebral nerve is the "olfactory nerve," which causes the sensation of smell.

The second cerebral nerve is the "optic nerve," which e[illegible] nerve. cavities of the eyes, and terminates within the eyeball as a [illegible] occipital and

Cerebrum and Cerebellum, the Spinal Cord, the Chest and Neck Portions of the Vertebral Column, Illustrated Singly; See Below.



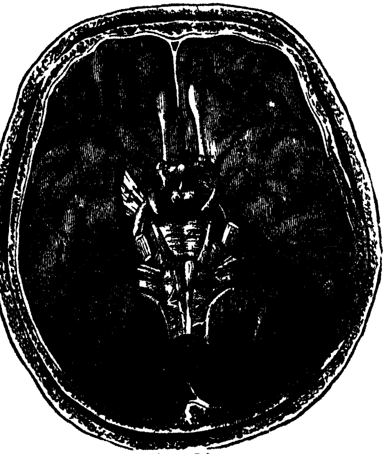


Fig. 80.

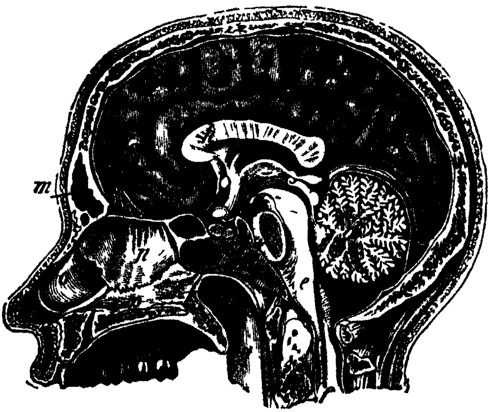


Fig. 81.

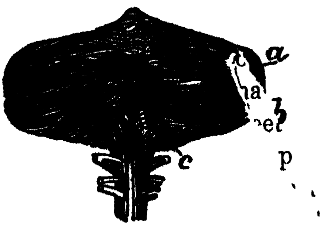




Fig. 83. Fig. 82. Fig. 84.

Fig. 80. The under-surface of the brain. a) anterior. b) middle. c) pos-
pieces ... of the cerebrum. d) cerebellum. e) medulla oblongata (upper end
foliage, stra... cord). f) pons varolii. g) foot of the optic nerve. h) the olfactory
...ra cerebri.

Fig. 81. Longitudinal, vertical, central sections of the brain. a. anterior. b. middle. c. posterior lobe of the cerebrum. d. cerebellum. e. medulla oblongata. f. the spinal cord. g. Pons Varolii. h. corpus callosum. i. the fornix. k. the optic thalamus (behind it the corpora quadrigemina and the pineal gland). l. the tentorium cerebelli (between cerebrum and cerebellum). m. the frontal sini. n. the bony, and o. the cartilaginous nasal partition. p. the hard gum. q. the pharynx. r. the orifice of the Eustachian tube.

Fig. 82. The cerebellum, posterior view. a. the upper, and b. the lower half. c. the spinal cord.

Fig. 83. Posterior view of the spinal cord. a. medulla oblongata. b. lower end of the spinal cord with its fibres. c. the cervical portion. d. thoracic portion. e. lumbar portion. f. the sacral, and g. the coccygeal nerves.

Fig. 84. Anterior view of the cervical and thoracic portions of the vertebral column, with the sympathetic nerve and thoracic duct. a. first and b. serrated continuation of c., the second cervical vertebra. d. cervical vertebra. e. thoracic vertebra. f. head of rib. g. upper cava vena. h. left subclavian vein. i. jugular vein. k. azygos vein. l. beginning of m., the thoracic duct. n. orifice of this duct into the vein. o. uppermost and p. lowermost cervical ganglion. q. thoracic ganglion. r. splanchnic nerve and s. connecting fibres of the sympathetic nerve with the spinal nerves.

Facial Nerves.

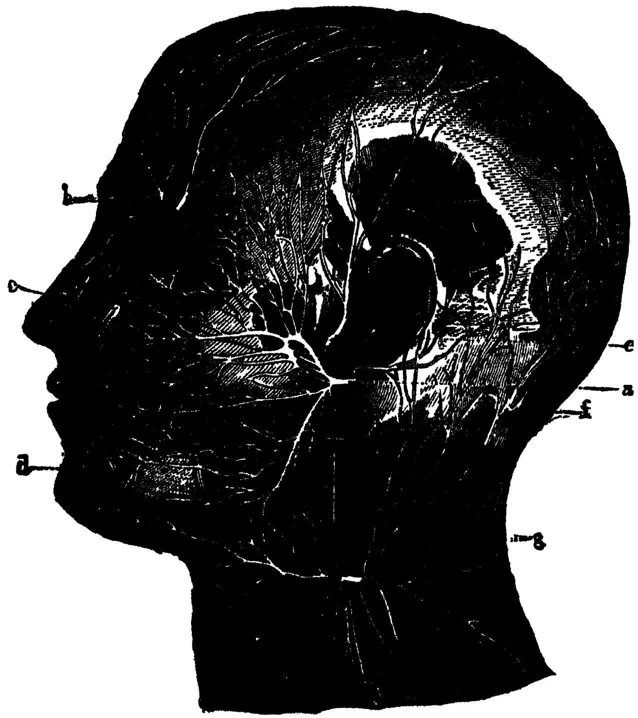


Fig. 85.

a. facial nerve. b. frontal supra-orbital nerve. c. infra-orbital nerve. d. mental nerve. e. auriculo-temporal nerve. f. occipital nerve. g. great auditory nerve, little occipital and cervical subcutaneous nerve.

The third, being the "motor nerve" for all the muscles of the eye except two, is called "oculomotor nerve in common."

The fourth is reserved for the eyeball, to enable it to move downwards and inwards, and is called "the fourth cranial nerve."

The fifth divides itself into three branches, and is called "trigeminal."

The first division passes through the orbital cavity to the ophthalmic and frontal regions.

The second division to the upper jaw and face.

The third division to the lower jaw and temples. It is both a motor and sensory nerve; it is partly also a sensory organ. It causes the chewing movement of the muscles of the jaws, and conveys the sensation of pains in the teeth, eyes and ears; moreover, from the front part of the tongue, to which its function extends, it conveys the perception of taste; and, finally, it occasions the secretions of the lachrymal and salivary glands. It may also, when abnormally stimulated, produce spasms in these muscles, as lock-jaw, chattering of the teeth, etc.

The sixth cerebral nerve, called the "exterior oculo-motor nerve," is, as the name implies, a motor nerve for the muscle of the eyeball to move it outward.

The seventh nerve, called the "facial nerve," is both a motor and sensory nerve, and radiates from the head of the medulla oblongata to the facial muscles. This nerve may cause facial spasms and paralysis.

The eighth nerve, the "auditory nerve," serves only for hearing, and is, therefore, purely a nerve of sense. It is connected with the inner part of the ear.

The ninth pair of nerves, the "glosso-pharyngeal," are at the same time motor and sensory; one branch extending to the upper portion of the pharynx, and the other to the tongue.

The tenth nerve, "par vagum," or pneumo-gastric nerve, causes in the first place the movements in the muscles of the larger gullet and stomach, and, secondly, with its sensory fibres conveys sensation from all the organs of respiration, from the upper part of the digestive apparatus, as far as the opening of the stomach into the intestine, and, thirdly, regulates, controls and checks the activity of the heart by means of its contractile nerve fibres.

Through this nerve hunger and thirst are felt, and cough and spasm of the gullet and stomach are caused.

The eleventh cerebral nerve, called the "spinal accessory nerve," is really only an auxiliary of the tenth, sending out purely motor fibres. It takes its rise in the upper part of the spinal cord, to the medulla oblongata, passes thence the cavity of the skull and within causes especially the movements of the muscles of the neck.

The twelfth cerebral nerve, called "hypoglossal nerve," is connected with the muscles for the movement of the tongue.

THE NERVES OF THE SPINAL CORD. The spinal cord sends out thirty-one pairs of nerves through the openings of the vertebra, i. e., eight cervical, twelve thoracic or spinal, five lumbar or abdominal, five sacral, and one coccygeal pair of nerves, which are in close connection with the organs relatively to the skin and muscles and branch out into the finest fibres.

The brain is connected with the body indirectly by the spinal cord, and directly by twelve pairs of cerebral nerves, issuing from the base of the skull.

Figs. 52--58 give illustrations of the course of all the cerebral and spinal nerves.

BRAIN, Anaemia of the. This disease either comes on gradually owing to general poverty of the blood, or it arises suddenly in consequence of certain morbid conditions, as excessive hemorrhage, pressure on the vessels conveying the blood to the head, pressure on the brain exerted by growths within the skull, etc., etc.; also fright, anxiety, exhausting diarrhœa, long suckling, etc.

In children this disease often occurs with the symptoms of dropsy in the cavities of the brain.

The pupils of the eyes are dilated at the beginning of the disease, but become contracted in the latter stages.

SYMPTOMS.—Dark spots and patches before the eyes, giddiness, headache, burning pains in the head, singing in the ears, drowsiness, fainting fit, etc. The face, arms and legs are cold and frequently covered with perspiration. The lips and gums are pale in color. The state of the cerebral functions is characterized by mental dulness, low spirits and lethargy. When the anæmia is slowly produced, the symptoms are indistinguishable from those of hyperæmia.

TREATMENT.—The successful result of the treatment depends on the removal of the causes of the disease. The following general directions will be found most useful for the purpose: Non-stimulating diet, fresh air, attention to the skin and the regular action of the bowels by means of emenata, a horizontal position—the head being kept very low in acute cases. Further measures are: General massage, special exercises for promoting the circulation in the head, general strengthening treatment, gentle massage of the head, and stimulating packs for the same. (See "GRIPS, *Dr. Naegeli's*," and "ANÆMIA OF THE BRAIN" under KNEIPP-CURE.)

BRAIN, Atrophy of the, appears usually in old age and is a decrease in or contraction of the substance of the brain, or it may arise from abnormal formation of the head at birth.

SYMPTOMS.—In aged people loss of memory, childishness, otherwise partial paralysis, trembling, hallucination and other mental diseases.

TREATMENT as in Oedema.

BRAIN, Concussion of the. If a man receivees a blow on the head of sufficient violence, various injuries to the brain will result, manifested by loss of consciousness, power of voluntary movement and sensation. The injured person falls to the ground, his face is pale, hands and feet cold, pulse slow and irregular, breathing scarcely audible, sometimes being suspended altogether. This condition can be of shorter or longer duration. It may pass away in a few minutes or last for hours or even for days; it may immediately be followed by perfect health, or it may leave certain after-effects, such as a feeling of dull pressure in the head, giddiness and stupor. The precise nature of the injury to the brain has not yet been ascertained. Post-mortem examinations of persons who have died from the effects of concussion of the brain have sometimes revealed a slight effusion of blood or laceration, but they were too insignificant to be regarded as the immediate cause of death since cases have been known of far more serious injuries to the brain (e. g., paralytic strokes, inflammation of the brain, etc.) which have not terminated fatally. In other cases again death had resulted although no injury whatever to the brain could be perceived. It is therefore supposed that concussion in fatal cases resulted in paralysis of certain nervous centres of special importance to the vital functions, particularly of the centres on which the functions of the lungs and heart depend; hence the slow pulse and the scarcely audible breathing. If this paralysis be merely transitory it is succeeded, as we have seen, by complete recovery; if, on the other hand, it be prolonged, or the concussion be sufficiently violent to cause total paralysis, then death ensues.

TREATMENT.—The first object must be to counteract the rush of blood to the head. An enema of 86° should first be given to relieve the bowels. When this has taken effect it should be followed by a second (starch) enema of 59°—64° (about a wineglass); the patient should then be put into a cool shallow bath (82°—86°) with a cold bandage (68°), without the woolen wrapper, round the head, his legs, chest and back well rubbed with the bath water, and finally cool water (68°—73°) poured over the chest and back. The bath should only be continued till the patient gets cool under the arms (generally about five minutes). The patient is then put to bed, the lower part of the body is thoroughly rubbed,

to promote a uniform temperature, and hot-water bottles applied to the feet and calves to keep up the circulation in the lower extremities. Neck and abdominal compresses of 77° with calf-packs are often successful as detergents. After from two to four hours it will be necessary to repeat the treatment. Should sickness occur it may be counteracted, if the patient be able to swallow, by giving cold water, a teaspoonful at a time. It is highly important that the feet should be kept warm by packing and hot-water bottles, and the head cool by wet bandages (77°) frequently changed and without any woolen covering. The enemata can be given several times a day; those for retention in the bowel, as mentioned above, repeated every hour, are specially beneficial. Should there be any difficulty in obtaining a shallow bath, a hip-bath (73°) may be substituted; thorough rubbing with a towel or cloth dipped in cold water, and followed by vigorous friction with a dry towel till the lower part of the body is well warmed and the skin red, will also be found very effective. When improvement has set in, a light, non-stimulating diet should be observed, avoiding alcohol and highly seasoned food.

Brain, Dropsy of Cavity of, see "HYDROCEPHALUS."

Brain, Dropsy of, see "DROPSY."

BRAIN, Hyperemia of the, or CONGESTION OF THE BRAIN, is a condition arising from increase in the quantity of blood within the capillaries of the brain. It can be either acute or chronic and may be due to various causes.

SYMPTOMS.—Headache, giddiness, insomnia, vivid dreams, accelerated pulse, specks before the eyes, nausea, costiveness, very red or, in some cases, very pale complexion, excitability, convulsions, delirium, coma, madness, and paralysis.

CAUSES.—Increased action of the heart, violent emotional disturbances, severe mental work, fevers, diseases of the heart and lungs, and abuse of alcoholic liquors. Also tumors on the neck, tight collars, violent coughing, straining from playing on a brass instrument, etc.

TREATMENT.—In the first place the causes must be removed and a treatment adopted with special regard to the conditions favoring the disease. The principal things to be attended to are rest, with a raised position for the head, and a light, non-stimulating diet. In the morning a lukewarm (73°) wet rubbing of the whole body should be given with specially vigorous rubbing of the hands and feet. In the course of the day a three-quarter steam-bath in bed or a half steam-bath, the head being kept cool, with succeeding lukewarm (86°) bath, also a stimulating abdominal compress, with leg or calf-pack at night. Enemata and hip-baths (66° to 76°) of five minutes' duration should be given in case of

constipation. See also under "MENINGITIS." (If the disease occurs as the result of severe mental work, a towel wrung out in cold water may be wrapped round the head like a turban and changed when warm.) We also recommend walking with bare feet in wet grass or on footpaths for some time morning and evening. The short wrap should be applied twice and the Spanish cloak once a week.

To promote regular motions of the bowels a tablespoonful of water should be taken every half hour. Foot steam-baths before going to bed or hot foot-baths followed by cold rubbing of the feet are useful, also a daily trunk-bath of ten to twelve minutes' duration.

MASSAGE TREATMENT.—Forehead and temples should be rubbed with both hands simultaneously, and the same process applied vigorously to the neck, beginning at the region of the upper part of the ear and ending at the shoulders, without taking off the hands. Then the shoulder blades and spine may also be vigorously rubbed.

CURATIVE GYMNASTICS.—Mild cases can be successfully treated with gymnastics. Exercises for the lower extremities are particulary important, as they are the most effective in drawing blood away from the head. Nor should exercises of the abdominal regions be neglected, as they tend to promote regular action of the bowels. Group No. 7 is the most suitable in these cases.

See also Hyperæmia under "KNEIPP CURE" and "NAEGELI'S GRIPS." For Modes of Application see Index. See also "KNEIPP CURE," "MASSAGE" and "CURATIVE GYMNASTICS" in Index.

BRAIN, Hypertrophy of the. Here the brain is abnormally enlarged as a result of the increase of the tissues of the brain. This disease frequently arises from irrational diet as well as from overfeeding, and is especially to be found in scrofulous children and children with large heads.

TREATMENT.—Avoidance of the causes, light and non-stimulating diet. Infants should be suckled by their mothers or wet nurses, or have diluted milk or whole-meal food. Moreover, an abdominal pack at night and daily bath with vigorous friction of the spine.

Regenerative treatment should also be applied. See Index for Mode of Application.

BRAIN, Inflammation of the. This rarely appears as an independent disease, but is generally the sequel to some inflammation or injury to the skull by contusions, blows or falls, etc.

It is invariably confined to a single part (convolution) of the brain; its course may be acute or chronic.

Symptoms of the Acute Form.—Violent headache, flushed face, swollen frontal veins and throbbing, high fever, delirium and fainting fits. Excessive thirst, the nerves of the sexual parts greatly excited; sensitiveness to light and sound, weakness of sight and hearing.

Causes.—The same or similar to those of Meningitis.

The Symptoms of the Chronic Form are substantially the same, except that they are far more strongly marked, according to the locality of the inflammation.

Patients are sometimes tormented for months, and even years, with a dull pain in the head, resulting in a gradual loss of the power of thinking. They become stupid, nay imbecile. Frequently—we may say in the majority of cases—the seat of the original inflammation and of its subsequent chronic course is neither perceptible nor traceable externally.

Treatment.—As in Meningitis, which see.

BRAIN, Inflammation of the Membranes of the. (Meningitis.) This disease is of more frequent occurrence than inflammation of the brain, but like it, seldom makes its appearance as an independent complaint, being a consequence of injuries to or inflammation of adjoining organs; it attacks the dura mater as well as the pia mater, or the arachnoid of the brain.

Symptoms.—Inflammation either sets in suddenly or the following symptoms precede it: Feeling of heaviness, heat and sleeplessness; pressure in the head; unusual sensitiveness; dizziness, singing in the ears, insomnia, mental indisposition, incapacity for thought, etc. Quick pulse at the outset, diminishing gradually as the disease progresses.

This is succeeded by violent, unbearable, continual pain in the head, which gets very hot, and the sufferer experiences a difficulty in holding it up; the face is swollen, its color changes, being at one moment deeply flushed, at another unusually pale; the eyes are red, and seem to start from their sockets; the look is staring, unsteady and wandering. The patient shuns the light, the pupils are contracted; any sound, noise or smell is intolerable; the arteries of the brain throb violently; the veins are swollen to bursting; the pulse hard and accelerated; respiration irregular, violent and obstinate fever sets in. Simultaneously with it comes the disposition to vomit; diarrhœa or constipation appears; retention or involuntary passing of urine, restlessness and sleeplessness; delirium; the patient keeps constantly putting his hand to his head, and grinds his teeth. Later on stupor supervenes. The disease is either acute or chronic and is often of little moment, sometimes appearing, however, as a very severe affliction ending in death, unless abundant perspiration, urine, or bleeding from the nose should set in and procure relief.

The chronic course is frequently allied with disorders of the mind, with madness and idiocy, and death ensues in some cases after a second attack of acute inflammation.

CAUSES.—Injury to the skull, accompanied by lesions or lacerations of the cerebral membranes themselves; caries of the skull-bones, inflammation of the centre of the ear, transmitted to the cerebral membranes; severe affections of the brains (i. e., tuberculous deposits on the brain, especially with children, aged between the ages of five and ten, and, with adults, from twenty to forty) are frequently the primary cause, but it also accompanies various acute vascular diseases, as typhoid fever, pyæmia, measles, rheumatism, erysipelas, tuberculosis and pneumonia as a secondary disease. A frequent cause is sunstroke and immoderate indulgence in spirituous liquors, etc. For meningitis-tuberculosis (called also hydrocephalus), occurring rarely with adults, but often with weakly, delicately formed children, who are predisposed to it and have a tendency to tuberculous diseases, see "HYDROCEPHALUS."

TREATMENT.—Lukewarm (77°—86°) three-quarter pack, once or twice daily, having previously wrapped head and neck in a wet bandage of 86°—90° temperature; as soon as the body is warm, it is sufficient to sponge the head with water of 90°, the hair, absorbing moisture, and serving as a compress. Duration, according to the patient's comfort, one to two hours (when the feet are cold, hot-water bottles should be applied to them). This is followed by a full lavation (72°) and rubbing the legs—care being taken not to give a shock to the body—or a bath (86°), also with vigorous friction of the feet and mild affusions (77°), or, where required, head-baths, etc.

Stimulating leg-packs (72°) of one and a half hour's duration and continually repeated, combined with the bandages on the head, as mentioned above, should also be given.

From two to four small, derivative enemata (72°—77°) must be given daily. Feather pillows under the head must be avoided. The windows must be kept open and cooling beverages and non-stimulating food taken.

Lukewarm baths (86°—90°), in which the head is to be bathed gently, may, at the same time, be applied.

This treatment to be continued till the inflammation subsides. Lukewarm hip-baths (81°), or in some cases very mild foot steam-baths, or foot steam-baths in bed combined with cooling head-compresses frequently changed are also useful. Ice must on no account be applied to the head, it is far too irritating and only makes matters worse. In the chronic form, strictly non-stimulating diet and quiet mode of life are the chief conditions of improvement or cure.

Treatment by Massage.—Derivative massage of the throat, or that employed in fever, but with somewhat more forcible treatment of the neck and shoulders, is all that can be given in these cases.

Another Treatment.—A bath of 86°, with affusion, particularly of the head. Then the patient to be rubbed dry and at once put into a three-quarter or full-pack, but in the latter case, a cool extra compress to be placed on the neck, to prevent determination of blood to the head as far as possible. These packs are to be changed after one to one and a half hours. After the second pack, a bath follows as above. If the feet are cold, a hot-water bottle, wrapped in a wet cloth, is applied to them. During the intervals stimulating abdominal packs and leg-packs to be applied besides, cooling the head, which must rest on linen. Enemata, fresh air, massage, etc., as above. See also "Inflammation."

The feet and legs may also be wrapped up to the knees in sheets dipped in water. If they are very cold, the sheets must in the beginning be dipped in hot water. If the sheets at the feet get very hot, in about thirty to sixty minutes they must be dipped in cold water and then put on again. The arms, at least up to the elbows, are treated in exactly the same way as the feet; then a large compress, made of pack or coarse cloth, may be given. In three-quarters of an hour the cloth is again dipped in cold water. If the heat is still very great, a coarse cloth, doubled and dipped in water, may be put on the abdomen to draw the blood down to it. Nothing need be applied to the head beyond bathing it with a very wet cloth, or a lukewarm compress may be applied to the forehead and renewed whenever it gets warm.

Of perhaps greater effect is a cloth, put round the throat (throat compress).

These methods of treatment are applied alternately. For Modes of Application see Index.

In critical cases, a Natural Healer must be called in at once.

CURE OF INFLAMMATION OF THE BRAIN.

(From Dr. Körner's book, "The Safest Cure for Fevers.")

Our boy (aged three years) was seized with inflammation of the brain, and all medical help was of no avail. He was already at the point of death, when we applied as a last resource to Dr. Koerner, a Natural Healer, who happily restored him to health.

Mr. and *Mrs. Wendt.*

REPORT OF A CASE.

(From Dr. MUNDE's book, "Natural Healing and Hydropathy.")

I once treated two boys in Freiberg for inflammation of the brain shortly after my return from *Graefenberg,* when the ***Priessnitz*** Method of cure was still regarded with incredulity, and I was considered a cold-water crank. The doctor and friend of the family had already given the patients up when I offered to restore them to health within forty-eight hours. My treatment was proceeding most satisfactorily when Dr. *H.*, who had so liberally permitted me to interfere, took it into his head to undertake the treatment once more, and proceeded to put ice on the boys' heads; within six to eight hours the patients were by this treatment thrown back to the point at which I had undertaken their case, and Dr. *H.* then left them to me entirely until all danger was over.

REPORT OF A CURE.

(From the "Natural Healer," Journal for natural hygiene and therapeutics.)

The Storekeeper of our factory met me one day with tears in his eyes, and on my asking him what was the matter, he told me that an allopathic doctor had treated his youngest son, a boy of fifteen months, for "exudation of the brain" by giving him tincture of morphia and putting ice-bags on his head for three or four weeks, and had ended by saying that it was no use prescribing anything more, as the boy would not live through the following night (that was about nine o'clock). My advice to make a trial of the Natural Method of Healing was eagerly listened to, and thus, with God's help, I went to work.

I found the boy unconscious in his cradle; the pulse was exceedingly weak, but quick, the temperature of the body high. The windows of the hot room were closed and it was truly refreshing to have them opened and to allow cool air to come into the room.

The parents were strictly forbidden to use any more medicine, and the little boy was placed in a tepid (68°—72°) partial pack (now I should begin with a partial bath instead). After two hours, during which fresh compresses were repeatedly applied to his head and forehead, he was well rubbed in a lukewarm (92°—94°) bath, had a tepid (68°) affusion and then was taken back to his bed, lightly covered, bed-clothes being substituted for the heavy down quilt. Tepid (68°) water enemata soon opened the bowels, and another small detergent enema was given him afterwards.

The pack was repeated three times a day. What the ice-bags could not attain in three weeks, I accomplished in one day. The packs and baths withdrew so much heat from the body that the head had to give

up some of its surplus. From my experience I believe that many more patients, suffering from inflammation of the brain, die in consequence of ice-bags on the head than of the disease itself.

The doctor was greatly surprised next morning when the boy looked at him with wondering eyes. His opinion—we did not tell him that we had been "messing with water"—that some beneficial crisis must have taken place here, we should "continue in the same way," showed the parents that we had taken the right road. We did "continue in the same way," though not exactly as he meant. After a few days the child was out of danger, and has now become a sturdy boy.

Brain, Inflammation of Tissues, see "INFLAMMATION OF THE BRAIN."

BRAIN, Oedema of the, In this malady the brain is gradually permeated by water and becomes soft like pulp. It often results in apoplexy and may appear in an acute or in a chronic form.

It is frequently found in conjunction with, or, as a complication of, diseases of the kidneys and in heart disease.

SYMPTOMS.—Difficulty in breathing and swallowing, enlargement of the pupils, partial loss of muscular power, paralysis, and, finally, insensibility. The chronic form, which is also the commoner one, may be recognized by lethargy, somnolence, etc.

TREATMENT should be adapted to the original causes and the primary disease. Abdominal pack and leg or calf pack every night. In the daytime, half or three-quarter pack, followed by lukewarm (72°) rubbing with a wet towel, especially of the feet, or warm (90°) bath. For the rest regenerative treatment. For Modes of Application see Index.

BRAIN, Paralysis of Nerve of the. This disease which, as a rule, does not make its appearance before the age of thirty, attacks the nerves in the flesh of the face and tongue, which have their origin in the brain, whereby the action of the tongue, lips, and gullet is obstructed.

SYMPTOMS.—Difficulty in masticating, speaking, and moving the tongue, which increases until swallowing becomes impossible, the voice is inarticulate, as the lips are unable to do their office. Finally paralysis of the vocal cords ensues and the malady spreads to the spinal cord; then total paralysis and helplessness result.

CAUSES.—Shock to the head, excessive muscular exertion, chill, and also syphilis, etc.

TREATMENT.—Strengthening treatment combined with stimulating abdominal pack at night and stimulating leg and calf-packs. Vigorous rubbing of the feet with a wet towel in the morning.

Gentle massage of the body and throat and a steam-bath in bed and, on rising in the morning, sponging of the whole body. Non-stimulating

or, better still, vegetarian diet. Further, daily a foot steam-bath suitable to the state of the patient (but only if it agrees with him), followed by a cool rubbing with a wet towel. Perfect rest and regular motions by means of enemata. For Modes of Application see Index; see also "MASSAGE."

BRAIN, Softening of the. This results when certain portions of it are insufficiently nourished, by reason of an inadequate supply of blood.

SYMPTOMS.—Failing memory and halting speech, paralysis of one or more limbs, insensibility, etc.

TREATMENT.—Strengthening. Other directions will be found under treatment of "MENINGITIS" and "CEREBRAL HYPERÆMIA."

AFFECTION OF THE BRAIN AND MUSCULAR TREMOR CURED.

(From Dr. KLES' book: "Dietetic Cures.")

Mrs. Z., wife of a solicitor, aged forty-five, mother of two children, was said, two years ago, to have been mentally affected for a space of seven weeks.

SYMPTOMS.—Muscular tremor, continual perspiration, and sleeplessness. The treatment, according to the Natural Method, lasted from the beginning of November till Christmas. The above symptoms speedily yielded to it, and she regained her health completely, every action being quite rational when she was discharged from the Sanatorium.

BRAIN, Tumor on the. The same symptoms may appear as in inflammation of the brain; they, however, only develop gradually. They are very slight and scarcely noticeable at first, but increase by degrees, and are, therefore, not strongly marked. One of the principal ones is incessant and ever increasing headache, followed by dizziness, constipation, vomiting, spasms, fainting fits, weak eyes, uncertain gait, paralysis, partial or total loss of speech, sight, etc.

TREATMENT.—Non-stimulating diet, plenty of fresh air, gentle treatment of the skin, a stimulating abdominal pack at night, together with stimulating leg and calf-packs and cool or cold head compresses, to be changed very often.

This treatment may be repeated in the day-time in bed. See "HYPERÆMIA OF THE BRAIN."

Bracing the System, see "HARDENING."

Brandt's Pills, see Index.

Brandy, see "INEBRIATION."

BREAD CONSIDERED PHYSIOLOGICALLY.

**A Contribution to the Simplification of the Theory of Healing.
Extract from the books of HENSEL, the physiologist.**

What do we mean by the word "Physiological?" We mean, "in accordance with a healthy natural growth." By "Physiology" we understand a knowledge of the structure of the body, its functions and powers when it is in a healthy condition, and the physical and chemical conditions necessary to obtain this result.

Strictly speaking, every physician should be a physiologist, for the whole system of healing depends upon applied physiology, and yet during my own medical studies I have discovered how remarkably few men attempt to obtain that adequate knowledge of chemistry which is indispensable for the proper understanding of all vital functions. The consequence is, that instead of making proper nourishment, the chief means of producing health, the healing art in its perplexity rushes to every new artificial means, where one is constantly being put aside for another.

"Antipyrine, Salipyrine, Salol, Salopher, Phenacetin, Resorcin, Resorbin, Nervin, Antinervin, Migrænin, Sulfonal."—Such are the names of the artificial chemical products with which patients are to be cured. The chief object, apparently, is to keep away as far as possible from the path of nature. I am convinced that 99 physicians out of 100, if asked to name the exact component parts of the substances just mentioned, would fail to pass a satisfactory examination. There is another question I should like to put, how can men who practise the art of healing have any confidence in the effect of substances, when they know absolutely nothing of their chemical composition? Any one who ventured to use such means thirty years ago would have been pilloried without mercy as a quack and a swindler. But the times have changed since then. In these days a chemical factory, which does not produce a new antipyretic or some such compound is looked upon as very inadequately equipped, and will do no business at all. Hitherto it has always been the custom in this branch of industry to indicate fairly and squarely the component elements. Uricedin (destroyer of uric acid) was the first to emancipate itself from this custom, the man who compounded it was careful to conceal its ingredients. *Virtus post nummos.*

It is in my opinion high time to broach the question as to what has caused the Germans, who were once as strong as bulls, to become such weaklings, that they are compelled to have recourse to a hundred artificial supports, recommended to them by chemical factories, the only result of which is that the doctor is never out of the house.

In order to explain this unnatural state of affairs, let me interpolate the following remarks.

The scripture says, that man was made of earth and to earth he must return. Is that correct? Certainly, it is. But man consists not merely of earth, but of earth, water, and air. It is the earthy portions which hold together the fluid and gaseous portions of our body. This can best be understood by a comparison with limestone. The latter, though a heavy substance, is half composed of air or gas, i. e., of carbonic acid gas. The portion consisting of air will be observed to disappear when vinegar is poured on the limestone. Chalk acts in a similar manner, and chemically is the same as limestone. But lime can also be deprived of its gases by being burnt in a kiln. The so-called quick-lime that remains, only becomes heavier, thicker, and firmer by this process. In the same way when the human body is cremated all the gaseous substances pass into the atmosphere, and, on an average, not more than six pounds remain of an adult. Everything else is burnt up and passes in the form of gas (carbonic acid, watery vapor, and nitrogen gas) into the atmosphere.

The ashes of earthy parts that remain consist not merely of lime, but contain at the same time the salts and earthy constituents, which are peculiar to the muscular tissue, the sinews, the blood—and the nerves. For example, healthy muscular tissue contains much phosphate of potash, the bones chiefly phosphate of lime with phosphate of magnesia and fluorspar, while the nerves on the other hand contain phosphate of ammonia. But healthy blood, from which the child in the womb derives all its organs, contains carbon, silicate, fluorine, chlorine, sulphur, phosphorus, potash, soda, lime, magnesium, iron, and manganese, i. e., a combination of all the twelve parts, which singly are indispensable for the muscular tissue, the sinews, the nerves, and the bones.

We can now readily understand that when these earthy materials which give our whole body firmness, endurance, and cohesion are to a certain extent wanting in the blood, the organs, which are subject to continual change, wearing away, and reformation (for what remains at the age of twenty of the bodily substance of the original child), cannot attain a normal development again. It is from this cause that caries, scrofula, ulceration of the lymphatic glands, curvature of the spine and sternum, crooked legs, bleared eyes, shortness of sight, skin diseases, small-pox, scarlet fever, diphtheria, consumption, etc., arise. The majority of these arise from want of tone in the lymph and blood, the result of an unsuitable form of nourishment in childhood. As regards nourishment in general, it must be borne in mind that our body does not remain the same for four and twenty hours, even though externally it may appear to. As a matter of fact, every day we exhale unceasingly a certain portion of our blood and of the other bodily substances, and there issue forth slowly the same gases as in the case of cremation, viz.: carbonic acid, watery vapor,

and nitrogen gas. In these exhalations, just as in cremation, the same earthy portions remain behind; however they are not kept in the body, but dissolved in the blood, are perpetually being eliminated from the circulation by the action of the kidneys, and entirely leave the organism.

This statement of the matter reveals at once the imperative necessity of recovering by means of suitable nourishment all that has been exhaled and has passed off in urine in the course of twelve hours. Otherwise these organs and their capacity must remain weak and powerless. And that is precisely the point, in which we poor Germans suffer so much in the present century.

Originally matters were very different. All the earthy material of the body mentioned above, such as phosphoric acid, potash, chalk, magnesia, etc., were once formerly to be found in the grain used for bread. This has long ceased to be the case, and we have listened to evil counsellors, since we have been making our bread of the finest flour. In this flour the bran so rich in earthy matter is entirely lacking, and even granted that we retained for ourselves all the bran, which we now leave to oxen, swine, and geese, we should not secure our proper nourishment, as the following reasons will show.

The grain, which our primitive forefathers used, obtained its earthy composition from the ground which in those days had been formed by the ravages of rain-water from the materials washed down from the mountains, i. e., from the primeval rocks. These primeval rocks (granite, porphyry, gneiss, and slate) actually contain all the earthy substances that give plants and animals their cohesion. Unfortunately the soil has fared as badly as men have, it is no longer the same as it was. With each successive harvest we remove from the ground the mineral substances which, together with water, atmospheric air, and the sun's rays, produce the fruits of the field. After a thousand years of cultivation there are collected in the soil in increasing force the remains of the original composition of the rocks, their pith and essence gone, in the form of silicious earth and clay, the latter of which has no share in producing plants. In this way the valuable substances, which are essential for the production of healthy and nutritious plants, are being constantly used up.

In this way we see, how it is that, after a thousand years' ploughing and harvesting, the fruitfulness of the soil gives out. Then a new idea originated, viz., that fresh growth could be caused, if we covered the ground with the excrements of men and animals, i. e., with the remains of the nourishment we receive and which is not consumed nor re-formed into fresh lymph and blood, but remains unused, decays, and rots in the intestines, and finally passes out as superfluous or unserviceable. Since that time manureing has increased in favor, and it is precisely from this

point that our troubles date. For, on account of the ammoniac properties which form its chief contents, manure cannot of itself produce healthy and nourishing plants and herbs, simply because the element that keeps our limbs and organs firmly together and enables them to perform their functions is to be found in the firm earthy substances.

Our millers have long been complaining that a large quantity of our home-grown grain cannot be ground, because it stops up the mill-stones and the rollers. This is caused by the amount of albumen in plants and its ammoniac contents. In order to be able to grind this corn the millers have to mix it with foreign corn coming from countries, whose cultivation is not so old as that of Germany, and where consequently the soil still contains the proper elements. Such countries are Roumania, Hungary, Russia, and America, and even they are doing their very best to tread in our foot-steps.

Cases of anæmia, chlorosis, short-sightedness, deformity, scrofula, epilepsy, scarlet fever, diphtheria, consumption, and rheumatism become more numerous every day. Where is this all leading to?

Jul. Hensel has treated the whole subject exhaustively, and at the same time pointed out the necessary remedy in his work entitled, "Steinmehldüngung." He says, grind primitive rock, in order to bring it on the surface of the fields that have lost their force; then you will reap good grain again. People are actually beginning to make a move in this direction, but when one thinks that nine years have passed, since *Hensel* drew attention to this, and that there are only four or five manufactories of rock manure in existence, fifty years may well pass, before the system is generally adopted and all classes convinced. Before that day is reached many a child may die of diphtheria and scarlet-fever, and many a young girl of consumption—all of which could have been prevented.

Hensel also remarks:—In my practice as a physician my method has always been to leave all poisons and all substances, foreign to our organism, in the places they were in, and in their place to use for healing purposes simply and solely those substances which the blood requires for its healthy constitution. The character of these substances is revealed by the nature of the saline and earthy substances enumerated above, which our healthy blood leaves behind as ashes. I complied with these conditions, applied physiological salts and physiological earths in numerous cases for the purpose of cleansing the blood, and obtained the most astonishing and successful results.

Let us take a single example, in order to explain the method. I shall select for this purpose that common complaint, rheumatism. What is rheumatism?

By a fortunate coincidence I happened to hear in the same year (1879) in each of the two hemispheres almost the same words on rheumatism (in spring at the University of Geneva in French, and in autumn at the University of New York in English), the words used by the two Professors of Pathology, harmonizing as they do so remarkably, run as follows:—Of the nature of rheumatism and of its cure our knowledge is precisely as extensive as it was a hundred years ago. We do not know if the seat of rheumatism is to be sought for in the bones, the muscles, the nerves, or in the blood, and as for the remedies that are applied to combat it—and their number exceeds thirty—we are constrained to admit that we do not know of one single certain cure.

Well, but why did I study medicine, if they could not tell me the source from which illnesses arise, and the means by which they are to be cured. Fortunately, I soon discovered how it is that there is so much that pathologists do not know. The reason lies in the fact that the different branches are treated separately, and consequently the student fails to obtain a comprehensive grasp of the connection between these parts.

Many a disappointment have I experienced, when in physiology deviations were made from the well-worn track. "Ah," thought I, "now we are coming to it." But no sooner had the lecturer (giving way to the temptation) begun his explanation, than he gave a start, saying, "O, but that belongs to Pathology."

How often was I enraged at such a system. To me it appeared to be a swindle to call something that has expressly proved itself to be the art of not healing, the art of healing. People would say in a lordly manner, a real doctor has no scruples in confessing the incompleteness of his knowledge. Men who say we know what others do not know, only prove that they are charlatans.

It was obviously no use continuing the study of such a pathology, for the pathologists have long forgotten the lessons in physiology they learnt as young students, and consequently cannot build further on this essential foundation, for the simple reason that it is not at their disposal. But I said to myself, there cannot be two kinds of chemistry, the universal chemical laws must be applicable also to the phenomena of life and the same must hold good with physics. Surely said I to myself, chemistry and physics ought to be sufficient to explain the why and the wherefore of rheumatism. As no progress whatever has been made in this respect for one hundred years, it is really worth while trying to help our knowledge forward in some degree. At this point I will say what I have discovered. I studied first of all the worst form of rheumatisms—articular rheumatism. But it proved to be precisely the one that it was easiest to get at the foundation of, and before I was really aware of the fact my knowledge

of the original cause of articular rheumatism had given me the key to the proper understanding of nearly all other illnesses.

The blood-vessels in following the course of the bones, are bent. This is most noticeable in the knee-joints, when we sit down, and in the elbow when we write; whereas when we are standing upright the blood-vessels take a more direct course. In consequence of this bending of the blood-vessels the movement of the blood becomes slow in these places, especially in the arteries by which the blood that flows into the feet is forced upwards to the heart, when it has to overcome the physical pressure of a correspondingly high column of fluid, which, as we can see by the analogy of a pump, is only possible by powerful breathing and consequently only by virtue of an adequate number of red blood corpuscles to absorb the oxygen. Now a rapid stream carries with it sand and mud, which in the case of sluggish streams sink to the bottom and require constant dredging; the same applies to the flow of the blood, which descends from the heart, pours through the whole organism in less than two minutes and returns back to the heart a powerful stream of blood carrying with it the waste matter which is left over by the breathing as more or less completely oxidized remains of the tissues of the body. On the other hand, if the body gets insufficient exercise and a reduced exhalation and respiration, such as results from sitting at a writing table, the circulation is retarded. Besides this the inadequate breathing causes a large quantity of imperfectly oxidized albumen in the form of insoluble urates to accumulate in the blood. They secrete and deposit most readily at those places where the movement of the blood is retarded.

This is exactly where the joints are where the blood-vessels are bent. There the passage for the blood grows narrower and narrower in proportion as the deposit of urates accumulates. The first traces of this restricted movement of the blood manifest themselves in nervous twinges, but when the material which hinders the free movement of the blood accumulates further the blood must finally come to a stand-still in a larger or smaller number of these blood-vessels. This blood, when inside the vessels, is liable to congeal in the same way as the blood which is drawn from the veins, which, as is well known, clots immediately it stops flowing. The fact that a firm substance is formed from fluid blood causes this coagulation to be accompanied by the evolving of heat: that is why the phenomenon, on account of the heat which is thus generated, is called inflammation (inflammatory rheumatism). From this point the inflammation spreads further. For example, all motionless and congealing blood sets ammonia free; this has the effect of weakening the nerves, even though an attenuation of the blood may be noticeable.

This causes the paralyzed patients to lie and to be unable to move without great pain.

In his work *Hensel* has given a full explanation of the origin of ammonia in stagnant blood.

That ammonia in the blood has the effect of weakening the nerves is evident from the fatal effects caused by breathing carbonic oxide gas. All such gases contain ammonia.

It will readily be understood that this incapacitating of the nervous matter can extend to a larger or smaller area and that stagnation of the blood can take place in any part of the organism. Instead of the joints, the blood-vessels of the intestines (especially in the region of the capillaries which permeat the liver, the gastric wall, the walls of the intestines and the female sexual organs) as well as the muscles of the chest and the back may be the spot where stoppages of blood originate or develop. Then people constantly say that it must certainly be rheumatism. And not without reason.

It is a general rule that a sensation of pain is a sign of an obstruction in the circulation. Whenever pains and twinges arise, that shows that there is an interruption of the circulation of the blood at the spot where the pain is felt. The nerves have no other expression for the disturbance of their functions than pain; pain is their language, which is certainly capable of considerable modification.

It is said with truth that rheumatism moves from one place to another. The reason of this is that sometimes one and sometimes another blood-vessel is affected by a temporary stoppage of the blood. As soon as the fragment of excreted tissue which has hindered the free flow of the blood has been dissolved by fresh and more powerful blood, the rheumatism ceases in this place.

When, moreover, it is said that rheumatism must have resulted from a cold, this is certainly not altogether wrong—but in ordinary cases a cold is only a contributing cause, in so far as the blood-vessels scattered through the skin get contracted by external cold till a complete stoppage in the capillary tubes may result with further unpleasant consequences. It must nevertheless be remembered that healthy, vigorous, normal blood will absorb enough oxygen to keep the body warm by the process of oxidation, and to give it the capacity of greater resistance to external cold. We are not here speaking of the permanent effects of damp and cold on the constitution, *e. g.*, in damp, sunless and ill-warmed dwelling places, or camping out in damp trenches, or, in the case of frontier sentinels at night, exposed to the assaults of wind and rain.

The question then arises, how such stoppages of blood can be cured? And we learn from experience that fresh blood-serum and albumen of

good quality, i. e. blood provided with the proper quantity of mineral substances is able to re-dissolve and liquify the coagulated blood substance.

It is therefore our task to supply the blood with the lacking mineral substances, and we might, with the same means, cure the apparently most varied diseases, for as soon as normal or healthy blood permeates the entire system, every individual organ is benefited by it. Then the rapidly coursing blood gives new life to the nerve functions of the whole system, and when the patient feels better in consequence of this treatment it is immaterial to him whether the doctor describes his ailment as gastric or abdominal disorder, or as a complaint of the nerves and muscles. Experience has proved the truth of my theory. On the basis of my physiological and chemical studies I have administered the mineral substances constantly and consistently, notwithstanding the erroneous view of doctors of the old school that stomach and intestines do not assimilate mineral substances. I knew better; I knew that minerals combine organically just as well with the gelatine, sugar and albumen of eggs and the caseine of milk as with gelatine-sugar alone. Hence my successes which astonished so many.

I have succeeded in combining the physiological salts and earths, which latter are precipitated in water, and therefore in the process hitherto obtaining could not well be prescribed mixed with the salts, in such manner that I have them baked mixed with wheat-flour in the proportions necessary for healthy persons.

Nobody eats more bread than is adapted to his digestive capacity, and in this way everybody knows at once the quantity that agrees with him, the most scrupulous dosing cannot do more.

The mineral constituents which healthy blood requires for assimilation, that is for the building up or renewal of every organ are the following:

Oxide of potash	105	parts.
" soda	390	"
" lime	583	"
" magnesia	29	"
" iron	40	"
" manganese	2	"
Fluorine	2	"
Phosphoric acid	70	"
Sulphuric acid	130	"
Muriatic acid	455	"
Silicic acid	780	"
Carbonic acid	390	"

On the basis of the above figures I have produced an article to which I have given the name of

PHYSIOLOGICAL BAKING POWDER.

which, used in the proportion of thirty grammes to a kilogramme of wheat-meal with yeast, water and milk, furnishes a bread, which has the advantage of a perfect article of food. I call this bread "physiological bread." It may with equal propriety be called "vegetarian bread."

I will only remark that this bread can be baked with the addition of eggs, butter, milk and sugar, in other words, that cakes baked with the physiological baking powder will be found to be more wholesome, nourishing and pleasant to the taste.

I desire also emphatically to mention that leavened rye-bread can be improved in the same manner. But bread from wheat-meal prepared with yeast is to be preferred for weak persons and invalids, as it can be digested by the weakest stomach.

This bread will satisfy hunger for a longer time than ordinary bread. The explanation of this is that as a rulé we eat about four times as much as would be necessary for the maintenance of our bodies if our food contained all the mineral ingredients required for the renewal of the used up tissues.

A person who improves his diet by the use of physiological instead of ordinary bread need not be over anxious in the selection of other articles of food; he has only to observe the fundamental rule, to avoid all excess in eating. Nearly all stomach troubles can be attributed to the overloading of that organ with superfluous nutriment; the result, as we have seen, is congestion in the blood. For the more the intestines are loaded with food, so much the longer will the blood be retained in the vessels of the abdominal walls to digest it; and obstructions in the circulation are then inevitable. Fasting is nature's remedy for such gastric disturbances. Instead of this modern medical science has unfortunately taken to preaching the doctrine, "Feed up well, to keep up your strength!" "But I can't, I haven't a particle of appetite!" "But you must!"

What was it that *Kneipp* said to a Banker R., after examining him as to his manner of life and reckoning up what he used to eat for his first and second breakfast, his dinner, his tea and his supper in order to keep up his strength? He hit the nail on the head in his remark: "Do you know what is the matter with you? You want a second stomach to digest all that."

The foregoing observations contain abundant matter for reflection. Anybody wishing for further knowledge of *Hensel's* views is referred to his publications which can be obtained at any book store.

If *Hensel's* assertion that the earthy substances are absorbed by the digestive organs should be verified, he will have contributed to the simplifying of the healing art, and shown us a method of treating disease which has hitherto escaped attention. Anybody desiring to try the above mentioned baking powder should apply to Mr. *E. W. Teichel,* Leipzig, Sternwartenstrasse 39-41, who will forward sample packets containing 125 gr., enough for 3 kg. wheat-meal, for 25 cents.

The twinges, the tearing, piercing pains, are a sign of the independent action of the electric nerve-substance. In health we are not aware that there is electricity in our nerves, because the electric current courses in a circle in correspondence with the circulation of the blood. But as soon as the closed circuit is interrupted, the electricity in our nerves is at once perceptible in the same way that sparks bridge over the gap when an electric metallic circuit is interrupted. Now as the electric current in our nerves is induced by the current caused by the motion of the magnetic iron in the blood and passing through the blood-vessels running parallel to the nerve cords, what occurs is this: A stoppage of blood in the blood-vessels causes an interruption of the electric current in the walls of the vessels. In consequence of this the induced current in the nerve cords running parallel to the blood-vessels is likewise interrupted. This interruption manifests itself in sharp pains and twinges, which can be very severe in some cases.

Bread, How to bake, see Index.

Bread Soup, see Index.

Bread, Wholemeal, see Index.

Bread, Whole wheat-meal, see "DIET."

Breast, Cancer in the, see Index.

Breast, Female, Atrophy of the, see Index.

Breast, Female, Care of the, see Index.

Breast, Gathered, see "BAD BREAST."

Breasts, Induration of the, see "WOMEN, DISEASES OF."

Breast, Neuralgia of the, see "WOMEN, DISEASES OF."

Breast, Tumor of the, see Index.

BREATH, OFFENSIVE. May have its origin in various causes, e. g. gastric catarrh, ulcerations of mouth and gums, serious lung complaints, swollen tonsils and any secretion from internal organs. However, the principal cause is doubtless the putrefaction of the residue of food lodged in hollow teeth.

TREATMENT.—Rinse the mouth out frequently, and remove the scraps of food from the hollow teeth, which, together with the mouth,

should be thoroughly cleansed after every meal. Take plenty of fresh air, and get hollow teeth filled by an expert dentist. Temporarily this can be done by pressing in warmed gutta percha, which is not so painful as filling by the dentist.

If the offensive breath is caused by any of the ailments first mentioned, it can only be removed by suitable treatment of the malady in question. See also "DISAGREEABLE HABITS."

BREATHING, Difficulty in, occurs in consequence either of an accumulation of phlegm in the lungs or pulmonary organs, or of obesity and similar complaints, the respiratory channels being impeded in their normal expansion. It may also be due to tuberculosis or catarrh, and particularly to inflammation of the vesicular texture of the lungs. The morbid conditions may, however, lie outside the respiratory organs, e. g., they may be the result of plethora of the abdomen, pregnancy, heart disease, curvature of the spine, general poverty of blood, narrow chests.

In convulsive and nervous cases, see "ASTHMA."

TREATMENT.—Removal of the causes, and treatment in accordance with the complaint which causes the trouble. Above all, sleep with the window open, and take as much out-door exercise as possible.

In most cases benefit is derived from nightly stimulating abdominal and calf-packs; also frequent rubbing of the body with a wet towel, and massage of the parts affected. Breathing exercise should be diligently practised. See "IBID." For Modes of Application, see Index.

Difficulty of breathing with children may be caused by asthma, croup, quinsy, diphtheria, spasm of the glottis, narrow chest, etc. Treatment will be found under each heading.

BREATHING EXERCISES (Art of breathing). Dr. *Niemeyer* writes on this subject as follows: "The small number of respirations in adults shows us at once how the majority of people neglect proper breathing. For whilst each newly-born breather, in his desire to get as much air as possible, makes no less than forty-for respirations to the minute, a child five years old makes but twenty-six, and an adult only sixteen." He continues: "The teacher of gymnastics in the municipal schools in Cologne, Mr. *Lohmueller,* stimulated by my own writings, studied the art of breathing on a proper gymnastic basis, and arrived at such perfection in it, that on his relating to me his experiences on the subject in an irresistibly convincing manner, I found that I had until then overlooked one of the simplest things in the world, which shows how difficult it is to regard anything in an entirely unprejudiced manner.

In order to fully describe this new, and to every open mind the only rational, doctrine of the art of breathing—which is as important

as life itself—I place the following rule first and foremost: "Do not breathe from below upwards, but from above downwards."

There are few who, when they make an attempt to follow this direction, will not find that it is easier said than done; and for this reason that they are ignorant of the requisite posture of the body. It consists in taking hold of a stick (Fig. 86), called the "*Lohmueller's* Athemstab," with both hands (the knuckles outwards), whilst the arms hang down close to the sides. First position, "Hands down." (Fig. 86.) Now change the position of the wand by a vigorous movement into "Hands

The Art of Breathing.

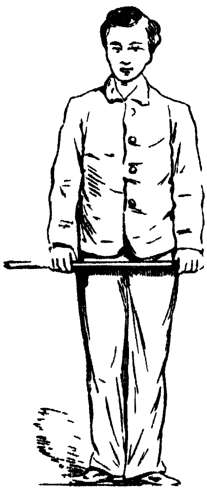


Fig. 86.

Position I. "Hands Down."

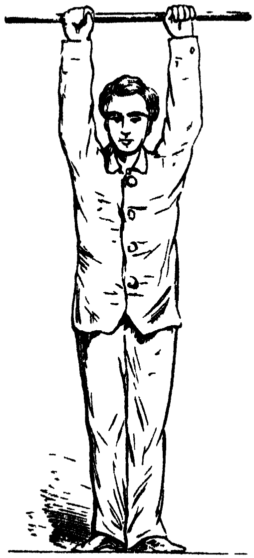


Fig. 87.

Position II. "Hands Up.'

up," by which the chest is expanded, and pass from this position with an equally vigorous bend to the third position. (Fig. 88.)

But for the terrible fact that bad health is the cause, we could laugh at the clumsiness which most grown up persons exhibit when trying to perform this simple exercise. With groans and wry faces they stretch their arms, kept in position by the staff, sideways, and labor with their whole body, and cannot successfully perform "Hands on shoulders," illustrated in Fig. 88. But those who do succeed generally express surprise at the new light which breaks in upon them, for when taking a full deep breath they experience the sensation of a heavy weight being taken from their chest, as though they had not breathed freely

for a long time. I will explain this sensation systematically. It arises from the fact that in this posture that part of respiration comes into operation which one might term "point breathing," or breathing with the upper lobes of the lungs (see Fig. 89), and I consider it the main act of respiration. Puffing out the chest has become a thing of the past, and has to be learned again with the aid of the breathing staff and breathing gymnastics.

To continue with our practical instruction: when a person has practised this art thoroughly, using the staff, he may come to do without it, and assume the positions by merely raising his arms (Fig. 90), and folding his hands over the back part of his head.

From a hygienic point of view he is, in doing this, only reverting to the way of nature. For when an infant wants more air, you will see how it stretches itself out, especially after a bath, throws back its head, presses its little feet against something, and expands its whole chest, so as to make us inclined to say: "It is breathing with arms and legs." To express it more accurately, it puts its entire body in a position calculated to expand the chest in every direction, and practises this expansion gleefully, and with all its might and main. The respirations keep pace with the movements of the limbs; and all gymnastics, therefore, whether practised for a specific purpose or indulged in for pleasure, such as swimming, running, riding, rowing, skating, etc., must of necessity be good for the development of the lungs. The act itself of purposely expanding the chest in every direction and ventilating every lung-cell, may be called "full breathing."

The Art of Breathing.

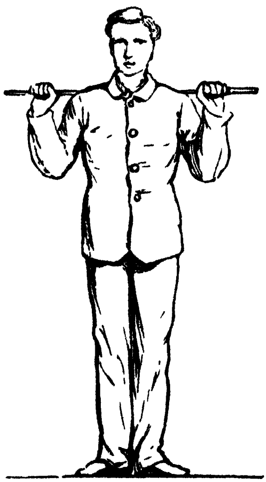


Fig. 88.

Position III.
"Hands on Shoulders."

Holding the breath is also an important exercise, and is performed in the following manner:

Raise the hands to the hips, take breath slowly and quietly, and hold it as long as possib[illegible]ing the same position, and then eject the air quickly. While holding the breath, count the time in seconds' time from beginning to end. People with weak chests can hardly count more than 10, whilst strong people and those that exercise their chest can go to 60 or 70, a man who does *Lohmueller's* exercise even to 100 and above. Such breathing exercises in good, pure air are of great importance. Vigorous and thorough full expiration should, therefore, be

practised frequently, as also counting in one breath till the breath is gone; then close the mouth, raise the shoulders, expand the chest, and let the air stream in through the nose at pleasure.

Next, hold the breath as long as possible, emit the air whilst "counting," and repeat this exercise five to ten times a day, whenever good air is at your command—best in the open air or even at the open window. It is a healthy piece of work, and will relieve and cleanse the blood, and make it capable of resisting illness. It would be far better, therefore, to sing a song with all your might during a ramble in field and forest than to smoke cigars; for a cigar between your lips renders vigorous respiration an absolute impossibility. Practise particularly breathing through the nose, for that is the organ of respiration, not the mouth.

Lungs, Wind-pipe and Larynx.

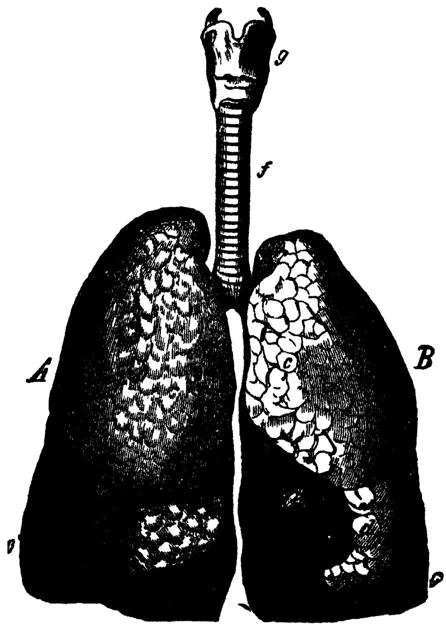


Fig. 89.

A) right lung; *B*) left lung; *C*) r[illegible] the heart; *c*) upper lobe; *d*) middle lobe; *e*) lower lo[illegible] [illegible]pe; *g*) larynx.

As a climax, when expansion by simply taking full breath, has been, as it were, introduced from within, practise exercises with the "Arm,' Lung and Chest-Strengthener" (Figs. 91 and 92), and so attain in a brilliant manner that on which the prevention of [illegible]ung affections so greatly depends, viz., "point breathing" to strengthen the respiratory

muscles, and to correct flatness and narrowness of the chest. Dr. ***Paul Niemeyer*** tells his patients, during consultation hours, how to use this "universal appliance," as he calls it, in the following rhyme:

"Forward stretch your straightened arms, bring them to each side,
Raise them next above your head, then let them backwards glide."

Lateral Full-Breathing is particularly recommended after inflammation of the lungs and pleurisy. See "Ibid."

Holding the Breath without Wand.



Fig. 90.

Dr. Wolff's Chest-Expander,

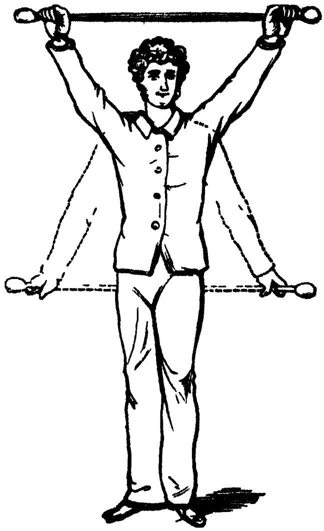


Fig. 91.

The Largiader Chest-Strengthener.



Fig. 92.

Extract from a Lecture given by Dr. Niemeyer.

Contrary to the general opinion that eating and drinking are the principal functions of life, hygiene maintains that air, or the "vital air," as the discoverer of oxygen calls it, is the real "pabulum vitæ" (Hippocrates). Whereas, under natural conditions, the "swallowing" of this nourishment is an automatic performance with wild tribes, the civilized man, working on the tread-mill of daily toil in a confined space, runs the risk of forgetting to take breath, gets chronically "air hungry" and becomes affected with consumption.

We may perhaps hope that in the same way as we have learned to value pure, unadulterated food, we may also come to value the breathing

Lateral or One-Sided Full-Breathing.



Fig. 93.

Lateral full-breathing after inflammation of the left lung.



Fig. 94.

Lateral full-breathing after inflammation of the right lung.

of pure, unadulterated air just as highly; yet hygiene considers the practice of the art of breathing—i. e., breathing with a purpose, methodically—as the primary step, because it enhances the appetite for air. The first desideratum is that, just as we provide several meals daily for our stomach, we should also provide our lungs with the rations they require—viz., air, by practising full breathing, an art which we must learn from the new-born child. Whilst this "born expert in breathing" extends his chest in a downward direction, we adults have contracted the reprehensible habit of breathing upwards to such an extent as actually to sterilize the

upper part of the lungs and so to develop tuberculous troubles. How to restore the original type by gymnastics, the lecturer illustrates most lucidly, recommending both full breathing and holding the breath. "Nothing less," he says, "is to be expected from a well-timed, persevering practice of the exercises than the extirpation of that chronic national curse, consumption, and the final cure of phthisis; and we have in the exercise of holding the breath 'a universal self-cure,' ready to hand for a host of complaints, such as asthma, sick headache, bleeding at the nose, hemorrhage, liver complaints, etc., all of which are kept in existence only by our neglect to cultivate respiration."

BREATHING, Frequency of. The number of respirations varies according to age and circumstances. A new-born child draws breath forty times in a minute; with a child five years old this number is reduced to twenty-four; with an adult to seventeen or eighteen, being a fourth the number of times the heart beats in a minute (about 70). It is well known that in taking bodily exercise and in fever the respirations are increased.

BRIGHT'S DISEASE may occur both in an acute and chronic form. A disease and inflammation of the kidneys, which impedes and arrests the secretion of the urine, is understood by this term. In the most serious cases the blood may become poisoned by the urea.

SYMPTOMS OF ACUTE RENAL INFLAMMATION.—Feeling of chilliness, acute pains in the renal regions, scanty secretion of urine, constant desire to make water, color of urine reddish-brown, thick and clouded, showing albuminous flakes when boiled. Further, vomiting, fever, pressure in the back; dropsical swelling of the face, abdomen, hands, testicles and nymphae; damp and clammy skin. With Bright's disease is often associated inflammation of the lungs, of the peritoneum and pericardium, etc.; it then becomes much more dangerous. Men are affected with it more frequently than women.

CAUSES.—Catching cold, dissolute mode of life, also various diseases, more particularly infectious ones, as typhus, small-pox, tuberculosis, ague, scarlatina, etc., and pregnancy. When it appears as a chronic disease, as it frequently does after the acute state, it is principally caused by medicine, frequent indulgence in alcoholic liquors, catching cold repeatedly, etc.

TREATMENT.—Steam-bath in bed daily, three hot-water bottles, with extra (4—6 fold) compresses on back (in the region of the kidneys), the same also on the heart until profuse perspiration ensues (duration about two hours), then (88°—90°) lukewarm bath, with 81°—84° affusions, accompanied by vigo[illegible] of the skin; 77° stimulating com-

presses in the region of the kidneys (from half an hour to an hour, according to requirement) and two or three hours' calf-packs. Every night, also, stimulating packs on calves and trunk, and T-packs. If feeling suggests, the last two packs may be given also in soothing form. When they are taken off, sponge-bath of that part of the body follows. When an improvement is visible, one steam-bath in bed each day, with packs on calves and trunk, and T-pack at night are sufficient, or an 86° (lukewarm) hip-bath of 10—20 minutes' duration daily. If steam-baths in bed cannot be borne with comfort, only mild rubbing of the whole body with a wet towel, or several lavations may be taken daily. Persons whose cutaneous action is in a bad state (caused solely by want of proper attention to it) may have dry packs by turns, combined with (72°) wet, lukewarm trunk-pack (1—2 hours), but only as an experiment, after which 72° sponge-bath of the whole body, or an 84° bath, with affusion. In addition, light, non-stimulating food, fluids should be sparingly partaken of, for perference milk or almond milk but not too cold, and alcohol strictly avoided. Procure regular motions by means of enemata and fresh air. Improvement may be noticed in a week or two, but it may not be for months. The urine begins to be brighter and clearer, and comes in more copious quantities.

Chronic Inflammation of the Kidneys may be developed from the acute form, or appear independently in a lingering form, and may then have reached an advanced stage before the patient notices it.

SYMPTOMS OF THE DISEASE.—Striking pallor and considerable decrease of strength, hard pulse; later, dropsical swellings (as mentioned above) and inflammations. Frequently also retinitis, and considerable enlargement of the heart, as well as increased excretion of urine, which is pale in color and contains little or no albuminous matter.

TREATMENT.—Daily a steam-bath in bed (as above) or soothing full-pack (two hours), then a (88°) lukewarm bath, or a (92°—94°) full-bath (duration 8—10 minutes). Compresses at night, as in the acute form, non-stimulating, nutritious diet, especially fresh sweet milk. Drinking fresh water in moderation, open bowels by means of enemata, and above all, complete rest in bed.

BRIGHT'S DISEASE CURED.

(BY H. CANITZ.)

One Christmas day, about five years ago, I was requested by a friend to see the four-year-old son of the manufacturer Dr. H. in Schloss-Chemnitz, who was dangerously ill and had been given up by the doctors attending him. As a matter of course I complied most willingly with this

request. The boy's father told me in his distress that he had not had me called in because he thought there was a likelihood of his child's life being saved, but only to be able to satisfy his conscience that he had left nothing untried. He said that the boy was swollen all over, that the urine, at least what little of it did pass, had an admixture of albumen, blood and pus, a proof that a degeneration of the kidneys had taken place, and that, therefore, a prospect of recovery was out of the question. Dr. H., himself an authority on homœopathy, had called the most eminent men of his science from Leipzic to the sick bed; and there were present besides three allopathic physicians and one homœopathic doctor of Chemnitz. If all these different gentlemen had been at variance hitherto with regard to the application of the medicines, they at any rate were unanimous now in their opinion that the patient was past saving. The natural method of healing was now to have its turn, and I was chosen to show what I could do. It was certainly a difficult undertaking, but since I had often seen that the vital force, when properly directed, had effected the seemingly impossible, I ventured to undertake the case. Every kind of medicine had, of course, to be banished, and my orders only to be enforced. Inspired by the knowledge that the action of the skin was capable of powerfully influencing and relieving the kidneys, I turned my attention to it. Compresses could not be applied, because the slightest pressure exercised on the abdomen—stretched to bursting—caused the most excruciating pains. However, mild and frequently repeated wet rubbings, and a non-stimulating fruit diet had such a wonderful influence on the patient's condition that some hope of improvement was indulged in. The excretions of urine became more copious, the skin more active and moist, the swellings subsided, and, to make a long story short, on the 6th of January—i. e., after about twelve days of the natural treatment—the boy, who had been in the jaws of death, was sitting again on his rocking-horse. When the homœopathists now wished to remove the traces of albumen, still found in the urine, with sulphur, I had no mind to disturb them in their pious thought; for me it was sufficient that I had removed pus, blood, and masses of albumen by regulating the activity of the kidneys.

I was convinced that the natural treatment would have wiped out the last traces of albumen in spite of the sulphur. Instead of many proofs in favor of this only the following:

A boy named *Roeske*, six years old, living now at Brückenstr. 4, II. in Chemnitz, had Bright's renal disease to a most dangerous extent. He was greatly swollen, passed but little water, and had been given up by the medical men; Master *Ruttloff*, six years old, of Haubold street 3, p. in Chemnitz; the nine-year-old son of the forester Mr. *B.* in Zöblitz, Saxony;

the young son of the butcher, Mr. *Reichelt*, Haubold street 7, in Chemnitz. They all had had scarlatina, and had been treated by medical men, after which they sickened of Bright's renal disease, with the usual dropsical symptoms and excretion of albumen, and had been given up as past cure. The two-year-old son of the gardener *Doorman*, living now at Eck street 10, and Master *Wetzig*, seven years old, living at Sonnen street 10, III., who, after scarlatina, had been seized with dropsy, were both suffering of the same disease, and, notwithstanding medical treatment, had been given up. In all these cases I undertook the cure, the medical treatment being discontinued as a matter of course. The Natural Method took its place, and all the patients recovered completely after a short time, and although no sulphur was applied the albuminous excretions disappeared. Of the numerous scarlatina patients whom I have treated not one died, nor sickened of Bright's disease. Surely a splendid certificate for the Natural Method of Healing.

Bronchial Asthma, see "ASTHMA."

Bronchial Catarrh, see "LUNG DISEASES."

Bronchial Spasm, see "ASTHMA." The same treatment as in Occlusion of Pulmonary Vesicles is recommended.

Bronchial Tubes, Catarrh of the, see "BRONCHIAL CATARRH."

BRUISE. A blow on any part of the body with a hard substance will cause the skin to discolor if it is not broken. The reason for this is, that the small veins and capillary vessels underlying the injured place are ruptured by the blow and cause the blood to accumulate there.

TREATMENT.—If small bruises are at once pressed with a hard substance the accumulation of blood will be reduced, and a swelling and discoloration can be prevented by constant pressing and kneading. Larger bruises should first be treated with soothing and cooling compresses, and afterwards with stimulating ones. The swelling or bruise should never be opened. See also "ABSCESS."

Bubo, see "CHANCRE."

BULIMIA (morbid appetite), is a sudden access of hunger which, if not satisfied, may result in sickness, weakness, and even fainting. Bulimia occurs with patients suffering from chronic gastric catarrh, from diabetes mellitus, diseases of the brain and spinal cord, hypochondria, hysteria, etc.

TREATMENT.—First of all, satisfy the hunger slowly, not eating too much at a time, then apply a strengthening or regenerative treatment adapted to the disease from which the complaint arises.

Bumps, Science of, see "PHRENOLOGY."

BURNING, HOW TO SAVE FROM. Any person whose clothes catch fire should at once throw himself or herself on the ground, and try, by rolling over and over, to stifle the flames by so cutting off the air necessary for the process of burning.

If there are other people near at the time, these should assist by throwing shawls, beds, rugs or even their own clothing upon the burning person; if the accident happens in the open air, earth, sods, or even manure, if nothing better be at hand, may be used for the purpose of cutting off the air from the flames. Immersion in water or pouring water on the flames is, of course, best of all, but if there is no water near, the person burning should not be allowed to run to get to water, as running would only cause the flames to spread more quickly in consequence of the draught.

Rolling on the floor or ground is the best plan, because, in the first place, as is well known, flames always have an upward tendency, and, secondly, the head is better protected when on the ground. Sometimes just striking the burning place thoroughly with outstretched arms will suffice to beat out the flames.

BURNS should, as soon as possible, be put, first into lukewarm and then into cold water, and kept there till the pain is reduced or gone altogether, and does not return when the injured place is removed from the water. This may often take hours, even half a day or sometimes longer, but it is the only certain remedy for burns. Parts of the body which cannot be held in water, e. g. the face, etc., should, when burned, be constantly wetted with water, or have wet bandages applied to them. If warm water is not ready at hand, no time should be lost by waiting while it is being prepared; the injured part should at once be put into cold water. The pain may also be eased by putting the burned place into flour or meal or by sprinkling toilet powder over it.

The blisters caused by burns should also be held in water as long as necessary, sometimes for hours or even half a day. If the limb or part of the body injured cannot conveniently be immersed in water, then wet bandages and affusions should be applied. If the skin is not broken, then the blisters will disappear in the bath, or by subsequent continual wet bandaging.

Blisters should not be pricked.*) With children who are seldom

*) Some Natural Healers prefer pricking the blisters, and especially when they are very large, and more particularly when they are on parts of the body which cannot conveniently be immersed in water for a considerable time. When the water has run out of the blister after pricking, rather wet (86°) bandages are applied and kept wet. By this means new skin is quickly formed, and this pushes off the old, dry, injured one. The old skin should, however, not be forcibly removed, but should be left to act as a protector for the newly formed skin, which is extremely tender.

reasonable enough to hold the injured limb in the water for any length of time, the wet bandages should be used. If the skin is broken in any place by the burn then a thin linen rag dipped in good salad-oil or in water (77° to 90°) should be placed on the wound and left there. It must, however, be kept wet by applying dripping wet bandages over it—the water used for this not being cold, but from 77° to 90° in temperature.

These bandages, which are to be changed as soon as they get warm or irksome, must be continued until pus begins to flow, which always takes place when not only the upper skin or epidermis but also the underlying true skin, connective tissue and perhaps the muscular fibre are burnt. When the discharge of pus or matter commences, then the temperature of the water used for the bandages should be 77° to 80°, and the under piece of linen allowed to remain on (but it should not be wet with oil any more) until the new skin begins to form granulation. It is then thoroughly soaked through and very carefully removed, and then replaced by a folded piece of fine linen dipped in water (73°); this should be changed and re-dipped every time the bandage is renewed.

When the discharge of pus has subsided or only a very small quantity is exuded, then the temperature of the water used for the bandages may be reduced to 66°, or even 61°.

As soon as the wound begins to close up, it should be washed frequently with water (61°) and covered with a dry piece of linen to exclude the air from it.

If, as is often the case in warm weather, the granulation should proceed too exuberantly, i. e. if so-called proud flesh be formed in consequence of the warm bandages remaining on the wound too long and drying there, then recourse must be had to cool or quite cold bandages, or syringing with cold water, by the application of which the formation of proud flesh will be stopped. For this purpose pulverized white sugar may also be strewn on the place, as sugar used in this way acts like caustic.

By this treatment the pain from burns will be readily relieved, and when only the upper skin is injured, the burns will be healed in four or five days, and deeper ones very often in seven or eight days.

It should also be mentioned that warm or lukewarm baths always have a beneficial effect on burns when the skin is injured. If cold water is used at once, the contrast in temperature is too great and reaction sets in too strongly; the pain increases and healing is retarded. Therefore, when the skin is not injured by the burn the temperature of the water applied should not be below 73°, and when the skin is

destroyed it should not be colder than 88°; as the pain decreases, the temperature of the water may be gradually lowered.

Some Natural Healers have of late altogether discontinued the use of cool or cold water in the treatment of burns, and employ water of 86° degrees only.

It is in accidents, when speedy assistance is of great moment, that the great value and astonishing simplicity of the Natural Method of Healing are recognized.

Most of those who, when burned, used the Natural Method of Healing for the first time, made wry faces at the advice of the Natural Healer and looked incredulously on the baths and bandages, but were astonished at the agreeable result. They were invariably surprised to find that their wounds were healed in about a third of the time required by salves and ointments and became ardent devotees of this rational system of healing.

In addition to the application of water there are also many simple remedies which can also be recommended for wounds, e. g. linseed oil, olive oil, dripping, bacon, also raw potatoes scraped, jelly, molasses, etc. A salve made of unsalted butter and the white of eggs (the white of one egg to a spoonful of butter), the two ingredients being well mixed and spread on a linen rag. Burns may also be strewn with flour, rice powder, etc., and covered up with cotton wool, the glazed packing of which must, however, be removed.

A very simple remedy easily obtained is to pour the white of an egg over the wound and allow it to dry there.

Burns of old standing should be treated like old wounds. See on this subject "WOUNDS" and "ULCERS."

C.

Cabbage, see "DIET."

Cake, Indian corn, see "DIET."

Calf Pack, see Index.

CANCER is in most cases a protracted (chronic) disease. It has various forms and attacks various portions of the body, *e. g.*, the uterus, mammary glands, lips, tongue, rectum, colon, peritoneal glands, œsophagus, bladder, salivary glands, eyes, liver, kidneys, scrotum, ovarium, penis, bones, etc., but in all cases it is accompanied by accumulation of ichorous pus and tends to the destruction of the parts affected. It mostly appears in persons of from forty to fifty years old, and is more

frequently met with in the female than in the male sex. The predisposition for it may be of a congenital nature.

SYMPTOMS.—An extremely malignant, painful and evil-smelling tumor which speedily saps the sufferer's vitality, and in its later course assumes an ulcerous character.

A person afflicted with cancer any length of time has a pale ashy complexion, the skin turns a yellowish color, the appetite gets worse and worse, he loses flesh constantly and his strength diminishes visibly.

The more vital the organ attacked, the more rapid is the progress of the disease at first; the more deeply seated the disease, the more difficult is the cure, and death follows more rapidly.

TREATMENT.—The prospect of cure is only a slight one. In the first place gentle treatment should be applied to the skin to alleviate suffering, such as warm bath daily (90° to 92°), with gentle affusions on the affected parts; secondly, a strictly non-stimulating and vegetarian diet should be observed (cancer is all but unknown among the aborigines of the East Indies, who live entirely on leguminous plants and on fruit) with plenty of fresh air and open windows at night. The cancerous wounds must be repeatedly cleaned with injections of clean water or camomile tea, and soothing or stimulating compresses should be applied occasionally. In the first stages full steam-baths, succeeded by full-pack and bath with affusions or in lieu of them steam-baths in bed likewise followed by a bath, three to four times a week will be found of benefit. If it can be done, apply also local steam-baths daily, after which the affected part should be bathed in lukewarm water (82° to 86°) with gentle affusions, and afterwards covered with a lukewarm (82° to 86°) rather wet and soothing stimulating compress. A strengthening or preliminary treatment may also be found beneficial and the Kuhne-cure has been very successful in the treatment of cancerous diseases.

For Modes of Application, see Index.

CANCER AND ECZEMA RUBRUM.

(From Pastor KOENIG's book on the "Natural System of Healing.")

This malady is generally considered incurable, but if the destructive process has not yet advanced very far, the Natural Method of Healing may effect a cure or at all events considerable improvement. The medical school attempted to accomplish cure by operations with the knife. But in the same way as the stoppage by the German apprentice of Donaueschingen of the sources of the Danube at Donaueschingen in no way reduced the quantity of its waters, so in cancer no operation will be of any use, even if performed by the most skilful surgeon. A pylorus once cut can never be replaced artificially; if intestine and stomach

are patched together, connection is certainly restored, but it is only a dead connection, because the living elastic door, regulating admission, is wanting and the whole scientific performance is nothing but patchwork, leading infallibly to death.

The patients operated upon by the renowned surgeon Billroth never lived long. The seemingly successful operations were certainly trumpeted abroad, but politeness as well as the public press, which is even in our time nearly always at the service of science, forebore to mention the deaths speedily ensuing. As with cancer, so it is the case with eczema rubrum, and other open sores. Instead of attacking the disease at its root, as should be done, the allopathic school always cut the parts where the discharges take place. So it happened to a young man last summer, whose blood and humors were thoroughly corrupted. They chopped off his arm, where the impurities had found an outlet, and they even boasted of such a truly scientific deed. When I heard of this monstrous proceeding I said that the poor man was doomed to death, and six months after he was a corpse. And very naturally so! The impurities deprived of their exit thus remained in the body, bringing destruction upon the entire system. Alas! poor victims! If you had only known the Natural Method of Healing in all its greatness and had had the courage to apply it, you might be among the living now. How do we proceed in cancer, eczema rubrum and other open sores? We prescribe fresh pure air and the strictest diet, consisting morning and evening of fruit, unleavened and unsalted bread, very mild, light, cool food without any seasoning at dinner. Pure water as beverage with fruit, and finally full-packs, packing the affected parts, etc., and as much out-door exercise as possible.

REPORTS OF CANCER CURED.

(Extract from Dr. Kles' book "Diabetic Cures.")

Mrs. R., aged 43, affected with cancer of the uterus. For four months she had malignant discharges and irregular excessive hemorrhages. Her appearance was sunken and emaciated; she was afflicted with a feeling of heaviness and pains in the abdomen. After the first three weeks of the treatment the worst symptoms vanished and her health began to improve. She had her courses regularly afterwards, and left the sanatorium in much better health.

Mrs. L. M., aged 54, six months before the beginning of the treatment her left mammary gland, destroyed by cancer proliferations, had been removed by operation. It was not long after that numerous glands swelled in the left armpit and on the inner surface of the arm. The patient suffered excruciating pains at the time she entered my institution,

and high fever developed soon after. Her condition, however, soon improved under the extremely favorable action of the treatment. There was no longer any immediate danger to life, and after five months she could be discharged as considerably relieved.

Cancer of the Tongue, see "TONGUE."

Cancrum Aquaticus, see "CANCRUM ORIS."

CANCRUM ORIS, or water cancer, is a cancerous ulcer in the cheek, occurring generally in children, and frequently appearing after measles, scarlatina, typhoid fever, more particularly when a great deal of medicine has been taken and the blood and humors have been vitiated by it.

SYMPTOMS.—A small pimple, or a small blister forms on the cheek which soon turns gangrenous, continually spreads, and leads to the destruction of the whole cheek.

The face is frequently terribly disfigured by ulcers and holes, extending over the cheeks, lips, nose and even to the eyes, and discharging a viscid, evil-smelling, gangrenous matter.

The course of the disease is not attended with any particular pain, nor do the children lose their appetite at first, but later on fever, emaciation, and unquenchable thirst set in and total collapse follows.

TREATMENT.—The greatest cleanliness ensured by tepid lavations of or gentle injections into the ulcerated places.

Full and three-quarter packs (three to four a week) with a hot water bottle wrapped in a wet towel at the feet (see "HOT WATER BOTTLE"), duration from an hour to an hour and a half, to be followed by a lukewarm (89°) bath, with head affusions. The affected parts should frequently be gently pressed with a linen rag, wrung out in (77°) water, and particularly during the pack. An abdominal compress at night, enemata, non-stimulating diet, pure, fresh air in the room, windows open at night. A bath of 88° must be taken every day. Apply the strengthening treatment betimes, and if that be insufficient the regenerative or preliminary treatment to improve the vitiated blood and humors. (For Modes of Application, see Index.)

Cane Chair Steam-bath, see Index.

CARBONIC ACID, Poisoning by, is brought about in wine-cellars, where fermentation is going on, also in deep wells, narrow pits, etc., resulting from an accumulation of carbonic acid, which, by reason of its high specific gravity, sinks to the bottom.

In cases of accidental poisoning by carbonic acid gas, the patients must be carried as soon as possible into fresh air and if that is not at once practicable, as in deep wells, etc., the carbonic acid must be speedily

removed from the spot. A very simple and effective means is to tie a long cord to the handle of an open umbrella, let it quite down and pull it up quickly. By repeating this process several times, the air will be sufficiently renewed. Or a good fire is lit on the top of the well, producing an upward current in it. To prevent such fatalities it is advisable, before entering questionable places of this description, to renew the air by the above expedients. See also "SUFFOCATION."

The general opinion that it is safe for a man to enter a place suspected of containing a large quantity of carbonic acid as long as a lighted candle will burn in it, is only partially correct; for a candle will keep burning (of course with a small sooty flame), if the surrounding air contains only very little oxygen, so little that man is unable to breathe it. To employ a burning taper for this purpose is certainly to be recommended, but it must not be supposed that the extinguishing of the taper is the first sign of danger; the place must be quitted when the taper begins to burn with a faint and dull light. It is well, therefore, always to take a burning light into a suspected place, and in descending, to hold it as low as possible, because in such cases it is the lower strata which are more impregnated with carbonic acid, and therefore more dangerous. For this reason it is expedient that the head should be higher than the light.

CARBO-HYDRATES. To these belong all those substances and foodstuffs which contain fatty matter, such as starch flour, sugar, vegetable jelly, gum, sugar of milk, honey, lactic acid, alcohol, etc. See also "ALBUMEN."

POISONING WITH CARBONIC OXIDE GAS.

Splendid success of the Natural Method of Healing.

The wife of Mr. *Bayer*, a saddler in Breslau, Bischoffstr. 1, communicated to the writer the following highly interesting facts with all the minutest details of the persons and witnesses concerned in the case, with the request to publish it.—On April 10th, I received from Strelitz near Ströbel, Zobtenberg, a telegram, "Come at once, brother and sister dangerously ill." Arrived at the place, I found them both unconscious. The cause of this sudden illness was stated by the doctor attending them to be poisoning by coal gas. Owing to the erection of a temporary gas stove—a new chimney being in course of construction—a quantity of coal gas had got into the bedrooms through the thin partitions. The young man awoke in the middle of the night with headache and stupor. His endeavors to open the windows were in vain. He fell down and remained on the floor, unconscious. He soon recovered, his sister, how-

ever, was so stupefied that all attempts at reanimation on the part of Dr. J., who was living close by, were futile. After my arrival in Strelitz he paid a second visit. To my question, whether there was any hope, he replied that recovery was utterly impossible; the only thing that remained to be tried was the application of leeches. Being an advocate of the Natural Method of Healing I objected to such a procedure, especially as I knew that my sister had formerly suffered from anæmia to such an extent that dropsy of the pericardium had supervened, from which disease she was only cured by the Natural Method. I absolutely refused to allow any blood-letting. As there was no prospect of my sister's recovery in the hands of the doctor, I was completely thrown upon my own resources. I first tried the effect of stimulating treatment, applying cold lavations, calf-packs, cool compresses, etc. I at once sent a telegram to Mrs. *Ronge*, of Breslau, who practices the Natural Method of Healing. She came and undertook the treatment. No application of water had any effect whatever on the patient. There she lay stiff and rigid, her eyes closed, her lips and teeth firmly pressed together, light breathing and feeble action of the heart being the only signs of life. Thus she remained for eighteen days. According to Mrs. *Ronge's* directions the patient was fed during the first days by means of milk-enemata only, as no food could be got through the firmly closed lips and teeth.

By the persuasion of others, who were dissatisfied with this condition of things, and especially to please my aged parents, Dr. K., of Breslau, was called in, who by pricking different parts of the body with a needle convinced himself of the complete absence of feeling and sensaiton. He said that her condition was certainly no longer hopeless, but that experience had proved that these kinds of poisoning left behind paralysis and weakness of memory. To what extent they would show themselves in the patient must be left to nature and time.

The normal excretions went on regularly and without hindrance. Meanwhile several other symptoms had appeared which kept me, the nurse, in most anxious suspense. ***On one occasion pulsation ceased altogether***, Mrs. *Ronge*, however, succeeding in restoring it by massage, compresses and other processes, and the signs of life returned once more. In the second week a remarkable discoloration of the soles of the feet took place. Quantities of vitiated humors collected under the epidermis and formed boils. Dr. K. explained this symptom as ***a product of combustion***, probably caused by the steam-jars given with the first packs being too hot. This explanation gave me unnecessary anxiety. Mrs. *Ronge*, on the other hand, looked upon it as a critical sign which could be observed also on other parts of the body where no jars had been applied at all, and took it for *local* blood-poisoning. The skin at the

soles was carefully pricked, and great quantities of poisoned humors were discharged; afterwards even pieces of putrified flesh were detached, but without causing bleeding. In the face of these facts Dr. K. could no longer maintain his theory and confessed his error. When he was asked what was necessary now, he said he intended to cut away all the mortified flesh and *supply it by pieces taken from sound parts of the body.* As a declared enemy of all operations I requested him to postpone that. So he did, and prescribed some powder instead, warning me *not to touch any healthy parts with it.* As a precaution I did not apply the powder at all.

When, after a lapse of three weeks, the patient opened her eyes at times, and, after regularly oft repeated massages of the neck and the lower parts of the face, showed a desire for food by making the movement of swallowing, her condition, considered hopeless at the outset, improved rapidly. As a consequence of the many full-baths which she had had, the skin had considerably softened inside the convulsively clenched fists; but it got hard again after her fingers had been opened by force. In short, after about three months' treatment by Mrs. *Ronge*, the patient has recovered now so far as to be able to take a walk regularly every day, and has a capital appetite. But what is most remarkable in her outward appearance is that every cavity and inequality, which had formed in consequence of the loss of mortified flesh and muscle, has now again completely filled up, a single scar or scratch remaining. It is thus that kind mother Nature heals, when left to herself, and without any of the transplanting of flesh deemed necessary by allopathists.

Not the faintest trace can be found of paralysis and weakness of memory which the doctor had so confidently prognosticated.

The assistance of the two doctors was not required after the first two visits. Happening to meet Dr. K. in the street lately, he enquired after my sister's health, and the effect of his powders. I told him, in reference to the latter, that the wounds as well as the whole illness had been cured exclusively by the Natural Method of Healing. He could only express his acknowledgment and wonder by exclaiming, "It is marvelous what water can accomplish!"

Mrs. *Ronge*, who is the wife of a clergyman, and to whom I herewith express my heartfelt thanks for her exertions, crowned with such well-deserved success, has in this case helped to effect an almost incredible cure. S., Breslau.

Capillary Atrophy, see "Hair, Loss of."

Carbolic Acid, Poisoning by, see "Poisoning."

CARBUNCLES. These excrescences, to which elderly persons are more particularly liable (boils mostly attacking younger people), are really nothing but boils of larger size and with more acute symptoms (see "BOILS" in Index), and arise from the same causes, the only difference being that in the case of a carbuncle a much larger portion of connective tissue (sebaceous glands or hair follicles) becomes subjected to inflammation and expulsion. They are at the same time liable to become gangrenous.

SYMPTOMS.—The swelling, which begins with a smal red knot, gradually spreads, and sometimes attains the size of an apple or even of a man's fist. It has a deep red color, and is exceedingly hard, producing a painful straining sensation. It gradually resolves into a suppurating ulcer, and matter mixed with blood issues from several openings, giving to the swelling a sieve-like condition.

The portion of flesh affected with the carbuncle is then thrown off by degrees, and a scar remains in the space where the connective tissue has been destroyed.

Carbuncles are generally found on the back or on the neck. They are always troublesome, and in severe cases accompanied by high fever and sometimes even by blood-poisoning, particularly when, as in the usual allopathic treatment, the surgical knife is employed to open them.

CAUSES.—Decomposition of the fluids, deterioration of the blood, and various other morbid conditions.

TREATMENT.—Long continued stimulating local compresses, consisting of six to ten layers of coarse linen, squeezed out in tepid (77°) water. They should be renewed when the pain increases or exchanged for soothing or steam compresses, and must be well and closely covered with flannel reaching a long way over the carbuncle. Or a piece of linen, moderately wrung out in cool water, is laid on the carbuncle and changed every few minutes, i. e. as soon as it gets warm. At the same time a stimulating pack is applied round the body above and below the carbuncle. This pack is exchanged for another in about two to three hours, or as soon as it gets dry. Compresses of fenugreek (Fœnum Græcum), boiled to a paste, can also be recommended, as they favor the discharge of pus (see "FENUGREEK" in Index).

At night (and also by day, if the pain is great) a soothing compress made of coarse linen, six to ten layers thick, wrung out in warm (90°) water, is put on the carbuncle, and renewed as long as the pain is excessive, when the previous treatment is again resumed. The patient should lie, if possible, on the side where the carbuncle is, in order that the matter may flow out more freely.

When the carbuncle has opened, the matter is squeezed out by means of warm cloths, applying very moderate pressure. If the matter has made internal passages, which are not within the reach of the compresses and bandages, they must be rinsed or gently syringed three or four times a day.

With fever, a three-quarter pack is necessary, with extra compresses on the swelling (duration one and a half hour), followed by a 73° full-friction or a lukewarm (88°) bath. A few lukewarm baths are also advisable with affusions on the swelling and the carbuncle. The diet must be strictly non-stimulating. Fresh air is also important, and the ulcer must be repeatedly cleansed when once suppuration has set in.

The most effective treatment, however, if it be practicable, and if the patient can lie on his back, is to get the whole body under operation and remove the morbid matter by general perspiration, thus relieving the affected places. For this purpose a daily steam-bath in bed with extra-compresses should be given, followed by a bath with extra affusions over the carbuncle, or a full steam-bath followed by stimulating full-pack, likewise with extra compresses and bath, combined with affusions on the carbuncle. (See also "BOILS" and "ULCERS." For Modes of Application, see Index.)

Care of Invalids, Rules for, see Index.

CARIES consists in ulceration of bone; the disease attacks either its hard cortex and is then called superficial, or it fastens upon the soft inner parts, and is then named internal caries.

SYMPTOMS.—An inflammation of bone and its periosteum takes place first at some small spot and a swelling then forms which is especially painful when hot. The periosteum is frequently bluish-red in color. Ulceration and suppuration gradually break out, and either thin, watery pus or malodorous ichor is discharged, mingled with very minute fragments of bone. The course of this kind of caries is always extremely tedious, but with the Natural Method of Healing may end in complete recovery.

CAUSES are not so much external injuries to the bone in a circumscribed place as rather deep seated diseases created by the vitiated condition of the blood, such as syphilis, tuberculosis, gout, scurvy, scrofula, etc.

TREATMENT.—Principally rest for the diseased limb, and a strengthening treatment to raise the strength of the patient, and to produce healthier blood. Promote the action of the skin by a daily tepid rubbing of the whole body (77°) with a wet towel, or lukewarm bath (88° to 90°). Clean the wounds also with injections of pure, tepid water (80°)

and with camomile tea, in case they smell offensively. Next, put thick, stimulating tepid compresses (68°) of linen, folded twice or more and well covered with flannel, on the wounds. These compresses must cover them completely in every direction. After being put on, their ends are stitched together or they are firmly tied with strong tape, so as to fit on closely without getting loose; when dry, they must be at once renewed, and repeated as long as there is discharge of purulent matter or pieces of dead bone. Stimulating three-quarter packs, too, or bed steam-baths applied every other day, have a most beneficial effect, by means of which a constant discharge takes place of the impurities (morbid deposits) existing in the body, and which otherwise would accumulate at the affected places.

For the rest, a vegetarian diet, plenty of fresh air and sun (also sunbaths), sleeping with the window open, and daily stools, enforced, if necessary, by enemata; in obstinate cases the regenerative or preliminary treatment combined with steam or sunbaths. (For Modes of Application, see Index.)

CURE OF NECROSIS.

By Frederick Harnsch-Chemnitz, Natural Healer.

(From the "People's Physician," Journal for natural hygiene and therapeutics without medicine.)

Otto, the son of farmer M., in Hillersdorf, aged thirteen, had been wrongly treated for two whole years by the family doctor for light periostitis with ointments, medicines, operations, improper diet, etc., and the disease had assumed such a malignant form that an amputation of the shin-bone was considered imperative, when the parents bethought themselves of me, remembering that three years ago I had cured one of their children of scarlatina, and three others of measles. Called in at last, I made an examination of the boy, and found that he was suffering from pronounced scrofula, and that his digestive functions were entirely suspended, with weak, accelerated pulse, and emaciated and cadaverous aspect. The mortified shin-bone was partly exposed, and great quantities of thick greenish purulent matter issued from the open wound. To my question why they had not called me in sooner, the parents replied that they had thought water could do no good in the present case, upon which I could not help expressing my astonishment that they thought it worth while now, when the case was so bad, to send for me to come and help with water. It was quite against my will, and only at their urgent request that I undertook the case. My plan was as follows: All highly seasoned and stimulating food was prohibited, and light food substituted, for the vital point here was to gradually re-animate the entirely suspended

digestion in order that better blood might be formed for the reconstruction of the system, without which successful cure was out of the question. I had the wounds cleaned with tepid water, on account of the offensive smell, and then covered with wet compresses covered with flannel, and changed when required. With the object of gently stimulating the skin, lukewarm (90°) partial baths followed, gradually lowering the temperature to 80°. Activity of the bowels was promoted by enemata, and the air frequently renewed by opening the window.

After a few weeks the patient's appearance changed for the better, his eye became brighter, his digestion improved with consequent increase in weight. Suppuration at the leg decreased visibly, but the entire shin-bone was now denuded of flesh and skin. When the patient's strength and appetite increased, I occasionally, as far as his strength would permit of it, applied the Schroth treatment, of half and whole days with a dry diet, to enable the system more easily to dissolve, absorb and discharge morbid humors. As a result of this treatment, several healing crises took place in the form of slight attacks of fever and indisposition. These crises manifest themselves in various ways during the healing of chronic disease, for it is undeniable that it is only the enhanced vital power which is able to eliminate effete matter from the system, and in this manner to pave the way for the cure of the diseease.

In the case of my patient, who had now been for nearly four months under my treatment, the dead shin-bone gradually detached itself below the knee, and the interesting process of the simultaneous formation of new bone-cells could be observed, till one day there ensued with the greatest ease the complete separation of the entire bone, which I have to this day in my office for exhibition. A fresh shin-bone had in the meantime formed, the wound closed within nine months, and was covered with a new skin, so that after ten months my patient had regained his youthful appearance, enjoyed tolerable health, and could make long excursions without any assistance. For want of space it is impossible here to enumerate all the details of the treatment necessary during his long and tedious illness. In a year the patient was restored to perfect health, and, after a course of study at an agricultural college, became a farmer. He is now a fine healthy young man, and performs any and every agricultural labor, as anyone can convince himself who takes an interest in the case.

Carrots, see Index.

Carp, Boiled, see Index.

CATALEPSY. This malady, which rarely occurs, usually atacks people who have suffered from mental disease, or severe nervous and cerebral affections. This condition is also characteristic of hysteria.

All the muscles of the body suddenly become rigid, a condition which may last for minutes, hours and days. Consciousness is always suspended in these cases.

The muscles of a person seized with catalepsy retain the position in which they were before the attack, till they are placed in an altered position, e. g. if an arm be bent, it remains in that position.

Since the pulse and the beating of the heart can scarcely be perceived, and the heat of the body is lowered, such a condition may be easily mistaken for death, if the symptoms enumerated under "DEATH" are not closely observed.

TREATMENT.—Derivative and general stimulating treatment, such as cool (66°) wet rubbing of the feet and a (73°) wet rubbing of the whole body, and afterwards also a steam-bath in bed or a stimulating full-pack. If the patient does not get warm in it soon, a hot water bottle wrapped in wet flannel is applied to the feet, or a dry instead of a wet pack is given. In other respects treatment as in tetanus. (For Modes of Application, see Index.)

CATARRH. A simple cold, with or without fever, is generally understood by the word catarrh. But the mucous membrane of the nose is not the only mucous membrane that may be the seat of a catarrh. Catarrh is an acute or chronic inflammation of any mucous membrane, arising in consequence of a cold, mechanical irritation, or other injurious or morbid condition and producing a greater secretion of mucus.

Every passage or hollow organ, running out directly or indirectly to the surface of the body, is coated with mucous membrane.

Thus we speak, for example, of catarrh of the nose, larynx, pharynx, trachea, intestines, stomach, bladder, urethra, uterus, vagina, etc.

SYMPTOMS.—A feeling of shivering, followed by heat, headache, lassitude, frequently fever, and a tickling, burning and uneasy sensation in the affected part. Redness and swelling and secretion of fluid, watery in the beginning, afterwards more consistent, and at last purulent.

TREATMENT.—In the first place, removal of the cause of the increased secretion of mucus. In most cases it is irritation produced by some injurious agent. Next, non-stimulating diet, gentle stimulation of the skin by a tepid (73° to 77°) rubbing of the whole body with a wet towel every day or a lukewarm (88° to 90°) bath, rubbing the body thoroughly after it. An abdominal compress should be put on at night. We also recommend full or three-quarter packs (preceded by a steam-bath, if the patient feels disposed for it, steam-baths in bed, ***Kuhne's***

trunk baths, shoulders and T packs, hip-baths, neck compresses, chest compresses, and fever treatment when there is fever.

Rest and quiet above all where the respiratory organs are concerned, an equable warm temperature, mild, pure not too dry air, breathing exercises. Also open bowels daily (enforced by enemata, if necessary) pure air, and vegetarian or mixed diet, as the case may be. In more severe, i. e. chronic cases, the strengthening treatment and massage should be adopted. (For Modes of Application, see Index.)

Catarrh being of various kinds, the applications differ; see, therefore, always the catarrh bearing on the individual case. Every application must be thoroughly adapted to the patient. If he be weak, a more gentle and longer treatment is far preferable to an energetic one. For deep breathing in the open air, see "BREATHING EXERCISES."

CATARRH, CHRONIC NASAL, is an obstinate chronic catarrh arising independently, or developed from an acute cold in the head.

SYMPTOMS.—It sometimes occurs without fever, and in that case all the troublesome symptoms associated with feverish cold in the head are absent.

Its general characteristics are, suppression of mucous discharge, and consequent swelling and inflammation of the mucous membranes extending to the forehead and throat, etc. Sometimes violent headache and fever, etc., increased discharge of a slimy purulent fluid, nasal tone of voice; difficulty in breathing through the nose, arising from the fact that, besides the obstructing masses of mucus, the mucous membranes of the upper nasal portions are greatly swollen. The veins are distended. The patient is compelled to breathe through the mouth and keep it open.

The swelling of the nasal mucous membrane is usually accompanied by swelling of the tonsils, of the mucous membranes of the pharynx, and of the eustachian tube, thereby causing further obstruction to respiration, and affecting the hearing.

The bad smell accompanying ozena (which see) is entirely absent here.

TREATMENT.—A steam-bath or steam-bath in bed daily; a stimulating abdominal pack at night, or, perhaps, a shoulder-pack or abdominal pack and throat compress. Wet rubbing of the whole body in the morning. (This may also be given with an ordinary cold.)

Foot-steambaths and foot-steambaths in bed do good service. Drawing water up the nose and frequent garglings may be recommended. Moderate stroking from the nasal bone upwards over the forehead, as well as stroking the forehead and temples with both hands at the same time to the right and left downwards, passing thence to massage of the throat is advantageous both in acute and chronic cold in the head. Fresh air

is most important. See also "CATARRH" and "CATARRH" in "KNEIPP CURE." (For Modes of Application see Index.)

Catarrh of the rectum, see "INTESTINAL CATARRH."

Catarrh, Pharyngeal, see "PHARYNGEAL CATARRH."

Cataract, Grey, Green and Black, see "EYES, DISEASES OF."

Catarrhal Ophthalmia, see "BLENORRHŒA."

Cauliflower Soup, see Index.

CELLS. Man stands high above the animals by virtue of his mental endowment, and is appropriately styled the Lord of Creation; in respect, however, to the constitution and composition of his body he differs little, if at all, from the higher animals. The origin of every animal and human body, the embryo, consists of a symple vesicle of organic fluid, called by men of science a cell. This cell contains a nucleus, and multiplies itself by division of its substance and of this nucleus; the newly formed cells are nourished by the absorption of various substances, assume various forms and discharge superfluous matter. By combining with similar cells they form the tissues of which the bones, muscles, nerves, glands, skin, mucous membranes, etc., are composed.

Globular Cells.

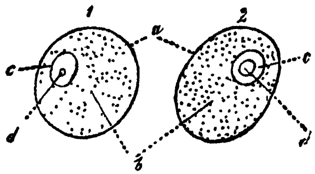


Fig. 95.

a) cellular membrane; *b*) cellular substance; *c*) cellular nucleus; *d*) cellular nucleolus.

Epidermis of a Human Embryo Two Months Old, Still Soft as Epithelium (magnified 350 times).

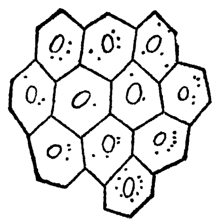


Fig. 96.

It would take us too far to describe the various kinds of cells, their development and division. Only by the aid of the microscope is it possible to gain a view of cell life. They are extraordinarily minute, their size varying from two millimetres (human egg) to .0077 of a millimetre (human blood corpuscle). The cell was originally regarded as a globular nucleated vesicle (Fig. 446) containing a viscid fluid, consisting principally of albuminous substance, salts and water. The term "cell," used to denote the elementary organisms in the animal and vegetable kingdom, has been adopted on account of the resemblance to a honey-comb shown

Section of the Mucous Membrane of the Vocal Cords.

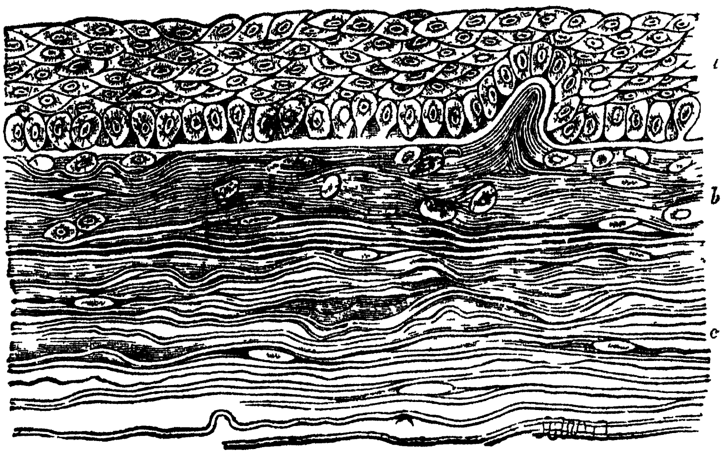


Fig. 97.

a) pavement epithelium; *b*) subepithelial layer containing cells
c) Fibrous frame work with numerous corpuscles of connective tissue and their appendages.

by microscopic sections through a number of connected cells of portions of young plants. In his work, "The Human Body," Prof. *Reclam* describes the cells as the stones of which our bodies are constructed. Our organism arises from the union of two cellular nuclei originating respectively from the female egg and the male spermatozoon. As it grows, various groups of cells are developed from it in the same way as branches, twigs and leaves are developed from the parent tree, and gradually change their form. These groups combine together, forming flat surfaces on lines, grow on fibres, absorb fatty matter, or grow hard by the accretion of other substances, as in the case of the growth of bones.

Ciliary Cells of the Mucous Membrane

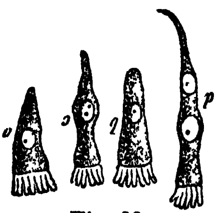


Fig. 98.

During the period of their growth and development the cells lie together in layers (Fig. 97), each cell an independent individual, separate from the others in regard to its fellows, form and combination, and nourished by independent absorption and excretion of matter. In certain parts of the body the cells of the mucous membrane grow into broad, flat surfaces, forming the flattened epithelium. In other parts, adjacent to the last mentioned, they grow into long lines, stretch and receive ciliary filaments on their free surface, forming the so-called ciliated epithelium (Figs. 98—99). These strings of cells move independently.

If such cells are removed from a living body, their rhytmic movements may for a long time be observed under the microscope. There is in the ciliated epithelium a cell which, not only in its growth, nourishment and development, but also in the movements of its parts, presents all the

Section of the Mucous Membrane of the Consonating Cavities

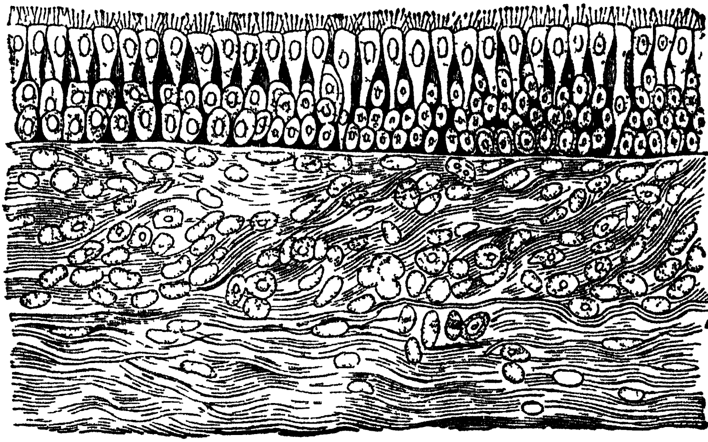


Fig 99

a) ciliary epithelium; b) subepithelial stratum, c) rough fibrous framework of the mucous membrane

features of an independent living organism. We find that the disc-like cells in our blood, the white corpuscles (Fig. 100), can even alter their shape and form under certain conditions. It has, for instance, been repeatedly observed that these white corpuscles pass through spaces in the tissues and in the walls of the blood vessels and literally wander about in neighboring portions of the body. This happens not only in inflammatory conditions but also in health, so that the white corpuscles present the appearance of living animals and seem under the microscope to crawl about at will.

White Corpuscles in Various Stages of Motion.



Fig 100.

The human body is therefore "alive" in a higher degree than is generally supposed. Nevertheless the cells of the tissues stand in the closest connection with those parts of the body which are considered the most highly organized and at the same time the most vitalized.

It has lately been demonstrated that delicate nerve-fibres penetrate into the cells, and end in the nuclei of the latter. The cell, therefore,

notwithstanding its apparent independence, is not really independent of the whole organism. It is subject to control, and is brought, by means of the electric telegraphy of the nerve-fibres, into immediate connection with the spiritual lord of the body, with the brain and spinal cord, which again consists of cells of a special kind, developed from the original cell.

The plant also in the earliest stage of its development consists solely of similar cells which likewise by growth (i. e., assimilation of fresh material) and by nourishment (i. e., change of substance) acquire according to their position, various shapes and combinations, and also various functions. The cells of plants, however, are not acted upon by nerve fibres, for the latter do not exist in plants. They are only found in animal bodies. The cells of plants are therefore more restricted in their activity, and at the same time more independent as regards their process of nourishment, for a severed twig can become an independent plant if it receives suitable nutriment, whereas a severed toe cannot be nourished; can never be transformed into an animal or a man. The human body, therefore, is an "organism" in a much higher sense, as its separate portions are all united, by means of the nerves, into one community.

There is thus a reciprocal action between the cells and the centre of the nervous system (the brain and spinal cord, ganglia consisting in their turn of myriads of cells). From the cells the brain derives power; upon them its existence depends; the cells on the other hand derive their capacity for healthy life and free activity from the sovereign control of the brain. What a perfect pattern of a commonwealth.

Let us then look upon the human body as a most perfect living work of art.—Is not every man indeed a miracle? Prof. *Reclam* well says:— "In proportion as the knowledge of the vital processes in the human body "is spread abroad among the people, in proportion as this knowledge forms "a part of general education, so will every man regard it as his duty to "behave in a manner worthy of a man to his fellow creatures and to himself "and feel himself to be a portion of the vast world-organism. For the "same laws which regulate the motions of the stars and which we see in "operation in this earth—these laws are also seen in the vital processes "of our bodies. Thus we are able, by means of the remedies in the store-"house of nature, warmth, cold, air, light, water, diet and exercise, to act "upon the cells in disease and, by timely application, to restore them to "their normal activity."

CELLULAR TISSUE, Induration of. This is a very rare disease. It consists of a peculiar organic disturbance, completely transforming the entire cutaneous and muscular parts of the body. The skin and also the muscles, soft and elastic to the touch when in a healthy condition, become hard and rigid, resisting pressure with the finger, and losing their pliabil-

ity. Both muscles and skin, including even the facial muscles, look as if chiselled out of marble.

The functions of the skin and of the hardened muscular fibre gradually become paralyzed; respiration is labored, almost impossible, and the circulation of the blood is impeded. This disease was held until now to be incurable, but has been completely cured by the Natural Method of Healing.

TREATMENT.—Steam-baths in bed (in the morning and afternoon) 77°, (twice) a day, duration two hours, with extra-compress on the body; after it (73°) rubbing of the whole body with a wet towel and massage, *e. g.*, kneading the muscles generally, or the intercostal muscles, etc. Stimulating trunk-packs and fresh air. In serious cases an able Natural Healer must be consulted at once.

Celsius, see "THERMOMETER".

Cerebral Anaemia, see "BRAIN, ANÆMIA OF THE".

Cerebral Atrophy, see "BRAIN, ATROPHY OF THE".

Cerebral Complaints, see "BRAIN, DISEASES OF THE".

Cerebral Hyperaemia, see "BRAIN, HYPERÆMIA OF THE".

Cerebral Hypertrophy, see "BRAIN, HYPERTROPHY OF THE".

Cerebral Nerves, see "BRAIN, NERVES OF THE".

Cerebral Nerves, Paralysis of, see "BRAIN, PARALYSIS OF NERVES OF THE".

Cerebral Oedema, see "BRAIN, OEDEMA OF THE".

Cerebral Pain of Rheumatic Nature, see "BAD HEALTH".

Cerebral Tumour, see "BRAIN, TUMOUR ON THE".

CEREBRO-SPINAL-MENINGITIS. This disease is sometimes sporadic, but generally epidemic.

SYMPTOMS.—After a short preliminary stage' during which the patient feels weak and depressed, the disease sets in, generally commencing with shivering, severe headache, sickness and fever. Soon the characteristic symptom of cramp in the neck makes its appearance. This is a spasmodic contraction of the muscles of the neck, which are very painful when touched. The rigidity of the muscles often extends to the muscles of the back, so that the whole spine is rigid and often bent backwards. The patient is often subject to mental wandering and delirium. The reflex movements are abnormally increased. Cutaneous eruptions, cramps in certain groups of muscles, inflammation of the tympanum and of the eyes with enlargement of one of the pupils are often met with.

TREATMENT.—As soon as the disease is observed or suspected a steam-bath in bed should be given; often the disease is nipped in the bud by this.

remedy. The treatment during the further course of the disease should be mainly derivative, abdominal and calf packs alternately with hot water bottles to the feet. Soothing compresses (59° to 66°) on the forehead and neck, to be changed on getting warm. If the disease be attended with fever, a suitable antifebrile treatment should be adopted, and the patient should be washed in bed on account of the pain attending every movement.

As a beverage fresh water or lemonade should be freely given. Stewed fruit may also be eaten. Nothing should be eaten during the first few days, then a little water-gruel may be taken, and the non-stimulating diet gradually introduced. Massage of the neck and of the whole body can be recommended.

CHANCRE is a corrosive ulcer, arising from infection with the syphilis virus. There are two forms, the soft and the hard chancre. The former is mainly a local disease, the latter, on the other hand, the vitiated symptom of a general infection of the blood with syphilis.

Symptoms.—The soft ulcer appears in about two or three days after infection on some part of the penis, most commonly on the beginning of the prepuce on the glans penis, or the interior surface of the nympha parva, and on the lower part of it, in the form of a vesicle or little knob, containing at first a yellowish white, later a yellowish green fluid (pus). It usually opens spontaneously or is scratched open, and it then develops into a small round ulcer, containing yellowish green matter. Its edges are red or covered with a yellow substance, with a spotted base, painless and soft to the touch. The glands lying in the vicinity of this ulcer swell and pass into suppuration.

The hard ulcer, the surrounding parts of which are hard, does not appear until from nine to twelve days after infection, when the poison has already entered the blood. This ulcer is less liable to suppuration and the swelling always appears somewhat later.

Treatment.—Very strict vegetarian diet, water as a beverage, rest and great cleanliness, the ulcer being frequently cleansed with water 88°. In the next place steam-baths in bed or steam-baths should be taken two or three times a week with full pack to follow, the penis or adjacent parts to be covered with an extra compress during the pack; the pack to be followed by a lukewarm (88°) bath. Local baths (73° to 77°) two or three daily, or tepid water should be allowed to drip on the ulcer from a sponge, squeezed out gradually; carefully avoid rubbing the sore on account of the irritation produced thereby. The sore must then be covered with wet lint or well-cleaned cotton wool, or the whole of the penis may be wrapped in a small wet handkerchief wrung out in (73°

to 77°) water, with a light, dry woolen cloth over it, which must be changed when the heat gets too great; a suspensory bandage should be worn night and day, and the soft chancre then as a rule heals of itself. A lukewarm (88°) bath or full bath daily is also recommended. Enemata in case of constipation; fresh air. The lint must not be pulled, but soaked off the wound.

The local treatment of the hard syphilitic ulcer is the same as that of the soft. The strengthening treatment should also be adopted. If the disease spreads an experienced Natural Heeler must be consulted. (For Modes of Application, see Index.)

Chapped Lips, see "SKIN, CHAPPED OR CRACKED".

Chair Vapour Bath, see Index.

Changing the Bed Linen of Invalids, see "SICK, NURSING OF THE".

Cheese Cake, German, see Index.

CHEST AND ABDOMEN, Organs of the. In the thoracic cavity are the lungs (Fig. 101 a—e); they are separated from each other by the mediastenum. The right lung consists of three, the left of two lobes.

THE LUNGS belong to the most vital organs of the body; they consist of cells and serve the purpose of breathing (inspiration and expiration); inspiration causes the thorax to expand and atmospheric air enters the cells of the lungs. Expiration expels the air from the cells, and the thorax contracts to its original size again. The function of the lungs mainly consists in withdrawing carbonic acid from the blood, and in charging it with oxygen in order to purify the blood, and can only be properly performed, when the air breathed is good, pure and rich in oxygen. (See also BLOOD, CIRCULATION OF THE.)

THE HEART *(f)*, also lying in the cavity of the chest, is situated in a somewhat slanting position between the two lungs; it is a large, hollow, fleshy body, about the size of a man's fist, and is enclosed in a cuticular covering called the pericardium. The apex of the heart points towards the left, in the direction of the fifth and sixth spinal cartilages; the upper and thicker part between the fourth and fifth ribs, at the back of the breast-bone. (For further information on the heart and its functions, see BLOOD, CIRCULATION OF THE.)

THE ABDOMINAL CAVITY. It is separated from the thoracic cavity by the diaphragm, and covered on the inside by the peritoneum, which latter especially serves to enclose the digestive organs. To these belong, besides the gastric and intestinal ducts, the liver *o* and the gall-bladder *p*, as seen in Fig. 101, as well as the spleen and the salivary gland, neither of which is visible in the illustration.

Organs of the Chest and the Abdomen



Fig 101.

a) upper; *b*) middle; *c*) lower lobe of the right lung; *d*) upper, *e*) lower lobe of the left lung; *f*) the heart; *g*) the pulmonary arteries; *h*) the pulmonary vein; *i*) the great aorta; *k*) upper vena cava; *l*) the diaphragm; *m*) cervical vertebra; *n*) right; *o*) left part of the liver; *p*) gall bladder, *q*) left and right kidneys; *r*) left and right ureters; *s*) bladder; *t*) uterus; *u*) left and right ovaries; *v*) left and right oviducts; *w*) vertebral column.

THE LIVER *(n* and *o)* lies close under the diaphragm behind the short ribs of the right side, and consists of two parts, the right and the left; the former is larger and thicker, the latter smaller. Both parts are closely connected.

THE GALL-BLADDER *(p)*, with its biliary duct, lies in the left cavity of the liver. During the process of digestion gall is secreted by the hepatic and biliary ducts; these unite and open into the duodenum, into which the gall is emptied. It consists of a yellowish, viscid fluid formed from the blood, which the portal vein supplies to the liver. When digestion is not in process this fluid is retained in the gall-bladder.

THE SPLEEN is an oblong vascular gland, shading from purple into blue, and its spongy mass is filled with numerous veins and lymphatic vessels. It lies on the left side under the diaphragm, between the stomach and the left lower ribs over the left kidney.

THE MESENTERIC GLAND lies below, behind the stomach, near the muscles, running down by the side of the spinal column of the diaphragm. Its smaller end reaches to the spleen, its head lies at the curve of the duodenum; it has a smooth, longish shape, and is composed of small glands. It serves to secrete a saliva-like fluid, for the purpose of chemically changing the composition of the food in the same manner as the gall does. Its mouth opens close by the side of the biliary duct into the interior of the duodenum.

THE KIDNEYS *(q)* are vascular glands of a brownish color and bean-shaped form; they lie at both sides of the spine in the region of the thighs and are enveloped in a covering of fat. Their inner part displays exceedingly fine spherical cells in the cortical layer, and in these cells urine is excreted from numerous tiny veins. The urine collects in the pelvis of the kidneys, from which it is conducted by the ureter (a long tube formed of cuticle) into the bladder.

THE BLADDER *(s)*, with its upper and back parts covered by the peritoneum, lies at the bottom of the pelvis, behind the junction of the ossa pubis; towards the front and lower part it assumes the shape of a funnel (neck of the bladder) and joins on to the urethra.

THE UTERUS *(t)* is a hollow, somewhat flat, pear-shaped body, turned with its broad part towards the peritoneal cavity, and with its lower portion towards the external sexual parts. The upper portion is called the fundus, the middle the body, and the lower the neck of the uterus; the latter is rounded off at the end, reaching into the upper part of the vagina.

The Ovaries *(u)* are somewhat flattened bodies, about the size of a nut, and are suspended on both sides of the upper extremity of the uterus in the folds of the peritoneum: the broad ligamenta uteri.

The Two Oviducts *(v)* are tubes composed of cuticle, terminating in the broad ligamenta uteri and are to a certain extent connected with the uterus.

Oral Cavity.

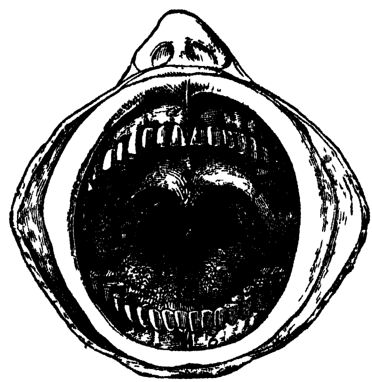


Fig. 102.

a) upper jaw; *b)* lawer jaw; *c)* gums; *d)* uvula; *e)* front-palatine arch; *f)* back-palatine arch; *g)* glands; *h)* pharyngeal opening; *i)* epiglottis; *k)* tongue.

The Digestive Organs. Fig. 103 shows them in a diagram, Fig. 104 anatomically; in the former only the beginning and end of the small intestine is shown, and this is long and much twisted many ways. The oral cavity (Fig. 102), containing various organs, serves to receive, to break up and to moisten the food, and is, like the whole digestive duct, supplied with a mucous membrane. In it is situated the large salivary gland, which empties daily about two pounds of saliva into the oral cavity. Only when food is masticated a long time and well does saliva mingle with it sufficiently to make it soluble and fit for digestion. A chemical change, too, is effected by the saliva transforming starch into sugar. Thus all farinaceous food, such as bread, rice, potatoes, etc., undergo their first change in the mouth, and the food passes from here through the pharynx (2. Fig. 104) into the alimentary duct *(6)*, extending behind the trachea and the lungs from the neck and through an opening in the diaphragm *(7)* direct into the stomach. The valve-like epiglottis *(3)* closes the opening in the larynx *(4)* and of the trachea *(5)* whenever food is swallowed, so that not an atom of it can find its way into the trachea. *(8* and *9* represent the lungs.)

The stomach *(10 11, 12)*, a longish sac, extending from left to right, has two openings; one, where the alimentary duct *(11)* enters, is called the esophagus; the other, the mouth of the intestinal duct, is called the pylorus *(12)*. Digestion proper begins in the stomach where the gastric juice chemically transforms food into chyle. The duodenum *(13)* joins the pylorus; *14* shows the liver, which is here turned up, to

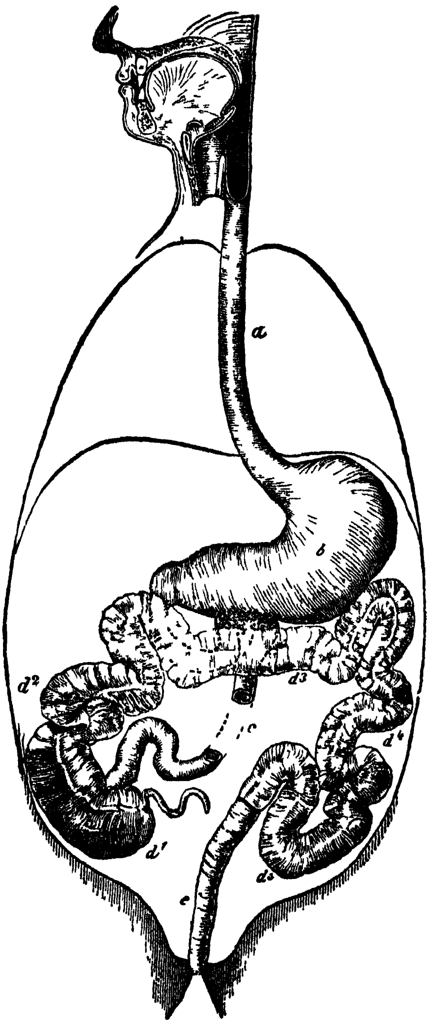


Fig. 103.

a) alimentary duct, *b*) stomach; *c*) duodenum; *d*[1]) caecum, with its S-like continuation; *d*[2]) ascending colon; *d*[3]) transverse colon; *d*[4]) descending colon; *d*[5]) S-shaped curve of descending colon; *e*) rectum; *e*) diaphragm.

show its under surface, the gall bladder *(15)*, the biliary duct *(16)*, the ventral salivary gland *(17)* being situated behind the stomach, between the spleen *(18)* and the duodenum. Starting from the pylorus, the part of the small intestine commences, the duodenum, the jejunum and the ileum already belong to it. The two latter portions (also called mesenteric intestines) are situated in winding coils like those of a serpent, in the middle of the abdomen *(19)*. The ileum is connected with the

Organs of the Chest and Abdomen.

(Anatomical view of the digestive organs.)

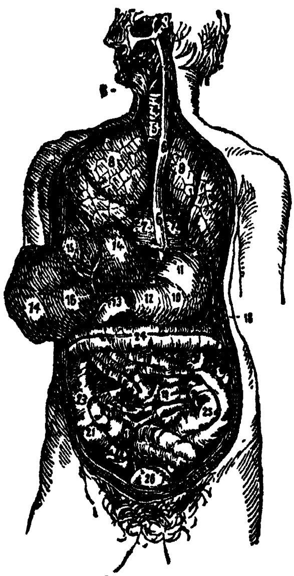


Fig. 104.

1. tongue; *2.* pharynx; *3.* epiglottis; *4.* larynx; *5.* trachea; *6.* alimentary duct; *7.* diaphragm; *8.*, *9.* lungs; *10.* stomach; *11.* œsophagus; *12.* pylorus; *13.* duodenum; *14.* liver; *15.* gall-bladder; *16.* biliary duct; *17.* ventral salivary gland; *18.* spleen; *19.* mesenteric intestines; *20.* large intestine; *21.*, *22.* cæcum, with its S-like continuation; *23.* ascending colon; *24.* transverse colon; *25.* descending colon, with shaped curve; *26.* position of the rectum; it lies behind the bladder and cannot be seen therefore.

large intestine *(20)*, and this one with the caecum *(21)* with its S-shaped continuation *(22)*. In *23* we see the ascending, in *24* the transverse, and in *25* the descending colon, ending with its S-shaped curve behind the bladder in the rectum *(26)*. We have thus followed the course of food through the body.

See also the folding model of the human body at the end of the book.

Chest Complaints, Chronic, see "BAD HEALTH".

Chest, Consumptive Structure of, see "CONSUMPTION".

Chest, Diseases of the, see "BAD HEALTH".

Chest, Muscular, see.

CHEST, Pains in the. These generally have their seat in the muscles of the thorax, the spinal nerves, the pleura and the pericardium, and are met with in Pleuritis, Pericarditis, Rheumatism etc. See under the various headings.

CHEST, Tightness of the. There is a feeling as if the thorax were too small for the organs it contains and a difficulty in deep-breathing. This feeling of oppression is met with in asthma, tympanitis, flatulence, diseases of the lungs and of the heart, pregnancy, goître (Derbyshire neck) tumours in the abdomen etc. and is usually accompanied by a feeling of sickness and inclination to vomit.

TREATMENT. Removal of the causes. Avoidance of all tight clothing. Stroking with the fingers towards both sides below the ribs, also massage of the abdomen. Fresh air, the practise of breathing exercises, curative gymnastics, without apparatus (see "IBID."), and an occasional drink of fresh water. A daily (86°) lukewarm bath, rubbing arms and legs vigorously in it with chest affusions. If that should not suffice, cooling or soothing (72° to 86°) compresses to be laid on the chest, and to be changed on getting warm; also repeated (66° to 72°) lukewarm vigorous friction of the feet, and stimulating foot and leg-packs with hot-water bottles. In other respects a treatment calculated to act on the original disease. (Modes of Application, see Index.)

CHICKEN-POX is mostly a mild, harmless, transitory disease in comparison with small-pox. It occurs frequently during an epidemic of small-pox and scarlatina and usually attacks children under eight years of age.

SYMPTOMS.—Fever is slight or entirely absent. The eruption, in the form of small vesicles, contains a bright watery fluid, turning gradually yellowish. The single vesicle attains its complete development in from six to twelve hours; on the second day its contents become dull-looking, and on the fourth day it dries up, sometimes accompanied by violent irritation. Since fresh vesicles are constantly formed the disease may spin out for several weeks with a wrong treatment. The eruption mostly attacks the back, chest, abdomen, thighs, and to some extent the forehead. The patient's general health is but little disturbed.

TREATMENT.—By means of one or several full or three-quarter packs, or in some cases steam-baths in bed, the disease is generally got over in one or two days.

Treatment, however, is sometimes hardly required, beyond keeping the child on a non-stimulating diet, and in a rather cooler atmosphere. Care has also to be taken that it does not wet the bed and catch cold thereby.

If there be great irritation whilst the vesicles are healing, relief may sometimes be given by cool lavations or compresses. (For Modes of Application, see Index.)

Chilblains, see "COLD, EFFECTS OF EXTREME".

Childbed, Diseases incidental to, see "WOMEN, DISEASES OF"

Childbed Fever, see "PUERPERAL FEVER".

Childbirth, see "WOMEN, DISEASES OF (SUPPLEMENT).

Childbirth, Abnormal. see "WOMEN, DISEASES OF".

Childbirth aided by Massage, see "WOMEN, DISEASES OF".

CHILDREN, Diseases of. It is mostly in the first months of their existence that children are subjected to attacks of disease which, if incorrectly treated, lead not infrequently to more or less rapid death, or to long-continued ill-health.

In the great majority of cases, however, the diseases of children arise from, or are aggravated by, the fact that the power given to them by Nature of resisting disease is weakened and taken away by ill-judged treatment—in keeping them too warm, by means of feather beds, hot-water bottles, hot rooms, etc., or in neglecting to take due care of the skin, and giving them unnatural, irritating, and indigestible nourishment, artificial foods or impure mother's milk; or liquids too hot and too sweet. If a child so softened, so faultily nourished, or over-fed, is left in a draught, or if it in any other way catches cold, or is exposed to unhealthy influences, it will generally be at once laid on the sick bed; because, owing to the softening, or other mistaken treatment, it will have lost all power of resisting such influences. (See also "HARDENING" in the Index.)

Under the head of "DISEASES OF CHILDHOOD" are classed those diseases to which children are specially subject. The chief of these are rickets, scarlatina, measles, small-pox, chicken-pox, whooping cough, diarrhœa with vomiting or children's cholera, croup, diphtheria, thrush, inflammation in the eyes of infants, vomiting, eclampsia nutans, jaundice, sores, convulsions, scat, rubeola, water on the brain, ulceration of palate and gums, mumps, worms, tongue tied, difficult teething, sleeplessness, etc. (For treatment, see each of these heads. See also the article "SCROFULOUS CHILDREN".)

Treatment. In ordinary cases when a child is unwell—when it shows signs that there is something wrong with it—whether or not fever is present, the mother, or nurse, should first feel whether its feet are warm; and if they are not, as is very often the case, they must be rubbed warm, with warm hands or warm woollen cloths: or a foot steam-bath, or hot foot bath, should be given. During a foot steam-bath, the head of the child should be kept cool; and it should be followed by a cool (66° to 77°) rubbing of the feet and legs. This should give place to rubbing of the whole body with lukewarm water (77° to 82°), after which the child should be dried, again well rubbed, abdominal-packed, put to bed and covered up warmly.

But before all, and quite at the beginning of the treatment, a lukewarm (82°) enema should be administered, in order to induce a motion of the bowels.

Instead of the above whole rubbing, a lukewarm bath (86° to 93°) may be given, with a douche a few degrees cooler. While the child is in the bath, the body, and particularly the feet and legs, should be well rubbed: and the head, if necessary, kept cool. After the bath, the child should be laid dripping wet on a dry sheet, wrapped in it moderately closely and then again in a blanket (dry packed) put to bed, and covered with a featherbed. If necessary, a water-bottle or stone beer-jar*) filled with warm water, enveloped in a wet linen cloth, and thrust into a dry woolen stocking, may be placed at the feet. As a rule the child will perspire and sleep in the pack; but if no perspiration takes place, the treatment should be repeated on the following day; or a three-quarter bed steam-bath may be given. The child's illness will frequently disappear when perspiration begins. After every pack the body should be rubbed and washed with lukewarm water (77° to 82°) or a warm bath (from 86° to 90°) may be given.

If the child falls asleep it should on no account be awakened: it will wake of itself if the pack incommodes it.

The packing, however, must not be over-done, that is to say, packs must not be given so often, nor continued so long, as to weaken the child in any degree. Perspiration cannot be forced. When it is ready to come it comes of itself; even without the child being placed in any sort of pack. The author must, moreover, earnestly impress upon every mother that if the child cries when in the pack, not out of naughtiness, but so as to show unmistakeably that the pack is troubling it, it should be at once taken out of the pack. Every mother should look constantly and diligently to this matter, and never leave the house while the child

*) The bottle should only be about three-quarter full, and tightly corked. Bottles with patent stoppers are the best for this purpose.

is in the pack, lest harm should come to the child in her absence from violent excitement and crying.*)

Besides the above methods of treatment, which may be continued, if necessary, for some days, the abdominal pack at night, and, if fever gets the upper hand, repeated steam-baths in bed, threequarter packs, baths, or other fever treatment, should be used. Washing the whole body is also to be recommended for fever. Instead of the three-quarter packs or steam-baths in bed (against which children generally struggle) stimulating leg and calf packs, combined with the abdominal pack, should be applied, and the child be put to bed.

Hand and foot steam-baths are also much to be recommended in children's diseases. But above all a child should have nonstimulating food, and abundance of fresh air; either itself getting exercise in the open air, or being kept in well-ventilated and airy rooms, with a window open at night. It should also have cold water to drink, and enemata should be given for derivative purposes, or in case of constipation. (See also the article "CONSTIPATION", if the trouble is obstinate.)

Sometimes the unfavorable symptoms pass off in a day or two; sometimes they will continue for a week or a fortnight, even with the most careful treatment. Nature requires time to get rid of the morbid matter in a system, and so to remove the cause of an illness. One should not therefore be despondent if the illness does not immediately disappear; but should observe the directions above given and persevere with the applications. Massage, in the form of frequent kneading, slapping, and tapping the whole body—perhaps after the daily bath or whole rubbing, or for bigger children the fifth group of Curative Gymnastics will be of great service. (For particulars on these two subjects, see Index.)

In certain unhealthy conditions of children, an energetic stimulation of the assimilative powers of the system, by kneading the whole body, particularly the arms and legs (and of the back of the neck, in whooping cough) twice a day, will produce a good result. For further particulars see under the headings "SUCKLING" in "WOMEN, DISEASES OF", "HINTS ON THE MANAGEMENT OF CHILDREN" in "WOMEN, DISEASES OF"; also under "CONVALESCENCE". "NAP AFTER DINNER FOR CHILDREN" in the Index.

That child is fortunate whose parents are experienced in hygienic treatment, and so able at once to relieve disease or sickness on its first appearance. How much pain and uneasiness is such a child spared in comparison with those who, if they fall ill, are immediately treated with

*) Children should be packed now and again, even when they are not unwell.

medicine, poisonous and irritating substances, by means of which the seeds of future ill-health are often sown!

Dr. *Bock* says "Woe to the children who fall into the hands of medicine-mad doctors".

In the case of children, every detail in the work of packing and applying compresses, etc. should be skilfully and smartly carried out. Nothing can make up for want of skill on the part of the nurse: therefore whole and three-quarter packing should be practised with dry sheets on the bodies of healthy children, over their clothes.

A pack can hardly, if at all, be put on a child as it lies in the cradle. The infant should be lifted out, and packed on a table; a cushion being laid under its head. When the packing is completed, the child can be replaced in the cradle, or laid on a bed.

CHILDREN'S DISEASES CURED.

(A Letter to the Author.)

Dear Herr *Bilz*:—

Two years ago I procured your book, "The new Natural Method of Healing"; and, as we have five children who have always been a good deal troubled with illnesses, I have, in every instance, followed the directions in that book; with the result that now, thank God, we have five strong and healthy children. That I have, in consequence, complete confidence in you, you can easily believe.

Louise Gerfin,
Berlin, Langenbeckstr. 10, I.

DISEASES OF CHILDREN.

(A death in my family.)

The first Sunday in May 1872 was a great day in my family; marked by a baptismal festivity at which all our relatives and friends, including the sponsors of the child, were present. My little three-year-old daughter received on this happy occasion a pair of gold earrings, and I took her with me to the station, where we were to meet some friends. Her grandmother brought her two boiled eggs coloured red, which the child by degrees consumed. She ate besides, in the course of the day, cakes etc.; and finally her supper; after which she was put to bed by the cook. The festivities were carried on in the gayest mood until late at night.

After the child had been asleep for some time, my wife heard a loud rattling in her throat, and discovered that she was in convulsions. Much alarmed, she called me; and, followed by our guests, I hurried

upstairs. We found the child lying in violent convulsions. There was a rattling in her throat; she rolled her eyes, flung her arms about, and began soon to foam at the mouth. We all stood round shocked and helpless; it was about midnight, and a doctor was not easily procurable. Besides, the older people among our friends advised us not to call one in, saying that if we tortured the child with internal remedies, we might produce a permanent distortion of her features. My mother seized a copy of the New Testament and laid it under the child's head, as is still often done among old people; but this, as a matter of course, was of no use. The rattling in the throat grew louder and louder; so that at last it could be heard by our neighbors; we wrung our hands in despair, and knew not what to do. In an hour and a half or two hours the child was dead.

What was the cause of this sudden illness and death? I can conceive no other cause than the overloading of the stomach. First, two hard-boiled eggs—I know now, though I did not know then, how indigestible hard-boiled eggs are, particularly for children; in the course of the day cakes etc.: then supper, consisting of soup, meat and preserves, given to her by the cook just before going to bed. The full stomach could not deal with the excessive quantity of indigestible food; consequently a rush of blood to that organ took place, and convulsions ensued. The child had been, up to that time, perfectly healthy, sound to the core; and had never had convulsions. If I had then known of the Natural Method of Healing, I should have had the child taken out of bed, and rubbed vigorously, paying particularly attention to the arms and legs, so as to draw the blood away from the stomach—where the accumulation, which was the cause of the convulsions had taken place—to the hands and limbs; and so to relieve the inner organs. In that way my child would certainly have been saved: as, when we discovered the sudden attack, there was plenty of time to apply remedies. As it happened however, we were unable to help the child, and, to the inexpressible grief of her parents and relatives, she succumbed.

That day I can never forget.

How very valuable a knowledge of the Natural Method of Healing would be in such sudden illness! The child might very probably have been saved by a single thorough and vigorous rubbing; or all danger would certainly have been removed by such a rubbing followed by a full-pack, or by a steam-bath in bed.

In June 1892, another child of mine, aged two years, fell ill with exactly the same symptoms. It had been for two days rather unwell when, on entering the nursery I found it lying with fixed eyeballs, and loud rattling in the throat; the hands convulsively clenched, and foam

on the lips. I was not a little shocked at the sight; for I had before my eyes exactly the same appearances as on the fatal occasion described above, twenty years before. I began at once to rub the hands and feet; but, as no immediate benefit was apparent, I ran and summoned my wife. We both proceeded to rub the hands, feet, chest, and back of the child, and also magnetized it, until at last the choking fit yielded, and the little patient was more at ease. Then we prepared a whole pack and steam-bath in bed, enveloping the child in the usual way, and laying a hot-water bottle at the feet. At first the convulsions seemed inclined to return; but as soon as the feet had been thoroughly warmed by the hot-water bottle, the child fell quietly asleep; and after it had slept about two hours all danger was past. The only trouble remaining was that, for the rest of the day, the child could not grasp with its hands, nor speak, nor walk; so severely had it been affected by the attack. If on this occasion I had been no wiser than I was twenty years earlier, my child would probably have died (from suffocation) in as short a time as the other. In this case, however, the patient went out walking with us the next day.

REPORT OF A CASE

By A. Rickli.

In March 1877, at two o'clock in the afternoon, a young man drove up to my house and brought me the information that his brother-in-law's only child was very ill, indeed dying; but that the parents wished to make a last effort to save it by means of the water cure. "Of course", thought I, "it is always so, only when all seems lost do people turn to the despised Natural Healers". But little disposed to respond to the summons I nevertheless drove, though somewhat against my will, with the young man to visit the dying child.

On the way I learnt from him that the child was only six months old; that it had suffered dreadfully from epileptic fits (Eclampsia); that it had been given up by the two most renowned physicians of Triest, one an allopath, the other a homeopath, and that the latter had declared the child would die within six hours. "A bright prospect," I thought to myself, "it would be more prudent on my part to go back than to allow myself to be led into making an attempt to save the child which can only end in a *fiasco.*" On the other hand, I was stirred up and encouraged by the recollection of many instances in which I had been able to set people on their feet again, after they had been given up as incurable, or beyond the reach of help, by approved physicians who for the most part considered themselves to be the sole depositories of knowledge. "Who

knows," was my conclusion, "perhaps a rescue is possible in this case also. So drive on!"

Entering the room in the richly furnished house, I found at least seven women standing helpless and at their wits' end round the sick bed; they included the mother, several aunts, friends and midwives. Examining the child I found it unconscious, its widely open eyes fixed and staring, the head very red but not hot. There was no fever; and the body, though well nourished, was that of a weakly infant (it was, I ascertained a seven months' child). The extremities, I was glad to find, were not permanently stiff as they often are after inflammation of the brain; they were only in the condition usual in epileptic fits, one of which came on just after my arrival and passed off exactly as would have been expected in the case of an adult. These fits recurred with greater or less violence at intervals of about twenty minutes. On the whole, the condition of this child, supposed to be dying, left me just one spark of hope, and only one, that I might be able to save its life.

I was further informed that, six days before, the child had had an epileptic fit. The family doctor, *L.*, who was celebrated as a children's doctor, had been at once summoned; and had declared that violent inflammation of the brain had set in with the teething process. Among other medicines, he gave the child calomel; but, as the child continued up to the third day to get worse, the parents called in the most eminent homeopathic physician in the city, Dr. *H.* After the first medicine administered by him, the child appeared really better for half a day; but after that its condition became gradually so much worse that, on the sixth day of the illness, after a copious exudation of matter from the ventricles of the brain, he also gave up all hope of saving the child. To the honor of this man be it here mentioned that, when asked by the parents if he thought they ought still to try the water-cure, he replied "Yes, that is your sacred duty; send and fetch the hydropath at once".

The first thing I did was to open both windows widely so as to admit a full supply of fresh air. This proceeding, as I afterwards discovered, made a great impression upon the host of ladies present. Then followed, one after another, the various measures which have been referred to above, and which for brevity's sake I will not repeat here.

After several days' treatment the epileptic fits had been reduced to slight twitchings, the child took the nurse's breast freely, and slept more quietly, and for a longer time. In like manner the green stools became less and less noticeable, just as they had previously become more and more so; and at last they disappeared. On the twelfth day, although the child still remained unconscious, I was able to declare it out of danger. On

that day I presented to the depressed and despondent mother a bouquet of camelias with the words: "To-day you may consider your child to be out of danger; accept this roseate-hued bouquet as a symbol of a young life granted to you anew by the Creator." A convulsive gasp, a torrent of joyful tears, and a warm handshake expressed her answer—the answer of one converted and convinced—the highest joy that a mother's heart can feel. This was the brightest moment in my thirty years' professional work. My own emotion was such that the tears were very near.

A few months later a substantial proof of the parents' gratitude surprised me at Veldes, in the shape of a handsome sliver-gilt cup, which bore the following inscription:

A. R.

Thou gav'st me rest, when through my infant limbs
The storm of sickness swift and boisterous surged;
Thou didst, as by the wafting of an angel's wing,
On hottest day my fevered forehead cool:
Thou broughtest me the best of earthly gifts,—
Life, health—when none but death seemed nigh.

On that same twelfth day, which chanced to be very fine, I had the child taken out in its perambulator into the large garden, shaded with chestnut trees which belonged to the house. When this came to the knowledge of the homœopathic doctor, who had been the last engaged in the case before I took charge of it, he clasped his hands above his head in astonishment and dismay. Some of the other doctors, jealous of the cure which I had succeeded in making, have since then adopted a strikingly hostile demeanor, in place of the indifference which they had previously shown. When they learned that the child was out of danger, they spread stories, which, unfortunately, are only too true with regard to medicine, to the effect that, though the child might live, it would certainly suffer from some serious infirmity; it would be either blind or imbecile. I comforted the anxious parents with the assurance that the course of diseases treated on natural hygienic principles is quite different to what it would be under allopathic or homœopathic treatment; because we natural healers endeavor to reach and counteract, not the external symptoms but the causes of disease by the excretion of morbid constituents in the blood, and by the restoration of normal circulation in the veins and nerves. The curative system of doctors of medicine consists in suppressing symptoms; which they often succeed in doing, while leaving the morbid humors in the system. These continue active, and the result generally is a chronic derangement of the natural functions. The epileptic fits were the result of congestion of impure blood in the ventricles of the brain. The remarkable exudation of matter through the skin over the

base of the brain, and the green, slimy stools, which were also significant and decisive, relieved that congestion. In consequence of these two fruitful processes of purification, the convulsive symptoms disappeared by degrees; and when the wounds healed, which was the best proof that the system had been thoroughly purified, the brain resumed its regular functions. Such terrible sequels as those suggested by the doctors can be explained when the symptoms (convulsions) alone are specifically attacked; but they could not follow where, as in this case, the cause of the illness is removed by the Natural Method of Healing, producing a signally complete purification of the whole system. The fears of the parents were set at rest by my explanation. Since then a year has passed; the child is healthy and brisk, and my assertion has been confirmed by the event. On the anniversary I was honored with the gift of a portrait of the mother and child, taken together.

THE DISEASES OF CHILDREN.

(Reported case)

By O. Wagner, Director of the Bilz Sanatorium, Radebeul-Dresden.

On the 31st of October, 1893, I was sent for by Herr *Lindner*, a butcher in Leisnig (Saxony). In reply to my inquiry whether the family were members of the Hygienic Society, I was informed that they knew of the Natural Method of Healing cure by hearsay only, and that they were entirely unpractised in it. Nevertheless, as both the local doctors had given up the patient—a child five years old—and as the parents wished to avoid the possibility of having hereafter to reproach themselves with having left anything untried they now desired to make a trial of the Natural Method. I examined the patient and found her in a very critical condition. She was quite unconscious, and it was impossible to obtain from her an answer to any question. The face was red and distorted with pain, and a frequent clutching at the head led to the conclusion that violent pain was felt there. Vomiting, which it had been impossible to stop, had continued for several days, the medicines which had been given being thus brought up again. The skin was wrinkled and loose, covered with a clammy perspiration; the hands and feet were cold; the pulse slow and thread-like; the action of the heart very irregular and intermittent; the temperature was 106 degrees and convulsions occurred frequently.

The treatment up to that time had consisted in plying the patient with all manner of medicines. On the small table by the bedside stood bottles of digitalis, tincture of stramonium, chloral hydrate, morphia—

which had been given in agreeable succession, while ice-bags had been applied to the head, with what degree of success was shown by the state of the patient. It was clear to me, after my examination, that we had here to deal with serious inflammation of the brain, and that not a moment was to be lost. I at once administered an enema (half a pint of water, 77 degrees) to draw away the blood from the head, and gave the child a full-pack, also 77 degrees, while applying cool, soothing compresses, often changed, to the forehead. The effect was satisfactory. The patient lay more quietly in her bed, was less delirious than before; in short, appeared altogether more easy. Then followed a bath, 73 degrees, an abdominal pack and calf-packs, and hot bottles to the feet. The result was a fairly good night and 4½ degrees less fever in the morning.

When this was told to the doctors in the early part of the next day, one of them, with an incredulous smile, expressed his wish that the treatment might be crowned with success. But this, in spite of the improvement in the invalid, was by no means assured as yet. The delirium, disturbed dreams and convulsions, recurred on the following day, and it became a question of renewing our efforts with persevering energy to snatch our patient from the jaws of an almost certain death. Derivative packs, soothing baths, refreshing washings, enemata, etc., given in the right manner and succession, together with a mild diet, at length accomplished the result of breaking the power of the disease, so that on the ninth day I was able to pronounce the invalid out of danger. The recovery proceeded slowly.

THE MORTALITY OF CHILDREN.

From Dr. Meinert's book "How to feed oneself well and cheaply?"

The frightful mortality among infants in the first year of their lives is due, above all, to bad nutriment; to the fact that mothers neglect to nurse their children and carry them out to soon; and to the drunkenness of parents.

Nearly one-third of all deaths of children under twelve months old are caused by faulty nourishment and consequent diseases of the organs of digestion. In the second year diseases of the organs of respiration come into the foreground, because those children whose strength could not survive a heartless and unsuitable diet succumb in the first year. The mortality among children is just twice as great in places where artificial feeding has become the rule as it is where the mothers suckle their children.

The following short table is more eloquent than a thousand tongues could be:

Of 1000 Children fed on	Throve very well	Throve fairly well	Throve badly	Died within 12 months
Mother's milk......	160	190	118	82
Wet nurses' milk...	260	254	306	180
Artificial food......	90	147	253	510

In Berlin, the mortality in the year 1878, attributable to the fact of children being reared on artificial foods, instead of on mother's milk, and to the quality of those foods, was estimated at 3,216.

Let every mother, then, endeavor so to order her own life and diet that she may be able to provide the child at her breast with an abundant supply of its natural nutriment, and that of the most nutritive quality, the nourishment that is by nature as much the child's as the child is hers.

HOW TO REAR HEALTHY CHILDREN, A WORD TO PARENTS.

The most precious possession of man is health. Is it not, therefore, our duty to do all we can to preserve it, and to strengthen it? Such strengthening, and consequent preservation cannot be better attained than by hardening in childhood.

Such hardening can be brought about in the first place by daily cool baths and rubbings, etc. and next by an appropriate distribution of the clothing, in a manner suggested by considerations of health. It is incontrovertible that of late years great improvements have been made in the clothing of children from the hygienic point of view. Only in regard to the feet are the most grievous sins still continually committed, as is evidenced by the constant complaints of cold feet, and of colds due to the feet getting wet. Undoubtedly the rule of health "keep the feet warm" is right; but it should not be understood as meaning that the feet are to be wrapped up as warmly as possible. With regard to their inherent warmth the feet stand in exactly the same relation to the body as do the hands; yet the great majority of parents allow their children to go with bare hands even in very cold weather while they do not appear to be able to wrap up the feet closely and warmly enough to satisfy themselves. Worsted stockings, warm shoes, inside soles, lined india-rubber overshoes, gaiters drawn over all; and notwithstanding or rather as a consequence of such an amount of wrapping up the children have cold feet and fall ill if their feet once get wet.

It has been declared again and again by eminent hygienists and pedagogues—I will only here name *Pestalozzi, Rousseau, Locke, A. Rickli, H. Canitz, Father Kneipp, Dr. Vogel, Th. Hahn, Loerenbruck, Dr. Schmidt* in the Encyclopedia of Educational Science,—that *nothing is more healthy than going barefoot as much as possible, and that children should almost always go barefoot.* Experience proves, in fact, that people who have gone barefoot during the whole of their childhood are much less sensitive to cold than others, and seldom suffer from cold extremities. Every one may easily convince himself in his own private garden what an advantage it is, in summer for instance to expose the feet to the air; how doing so refreshes the whole body, and, by constant use, so hardens the feet that they become almost insensible to wet and cold. The blood is drawn from the head to the feet by the stimulating effect of the cold on the latter, and they are thereby thoroughly warmed. In a few places in the country children of the humbler class are still fortunate enough to enjoy this means of hardening their constitutions in the greatest degree. In north-east Germany there are still, in country districts, children who have never worn a stocking; and who at most in the very coldest weather wear pattens. And how healthy such children are! Others, also, who are well accustomed to going barefoot, do not in the least mind having holes in their boots or shoes through which the water runs in and out as it pleases.

But although the utility of going barefoot may be acknowledged, the objection may be raised by the well-to-do townsman that he could only allow his children to do so in the house or in their own garden; that otherwise it would look too beggar-like and that their feet would become too dirty. On that head a means shall here be proposed whereby such well-to-do townspeople will be enabled to harden their children's constitutions by exposing their feet to the air.

Let the children wear sandals, which will protect the feet from dirt-damp, and injury; and, more than that, will render the natural development of the feet possible at the natural period of development, and so prevent the many forms of crippling the feet, corns, and so forth, which are so often occasioned in childhood. *They would also be a pretty and healthy article of dress in summer,* and in winter they could be worn in the house. Bound on the dainty young feet with colored ribbons, such sandals would have quite a charming effect; in any case much more charming than that of the ugly feet-deforming, leather shoe. The handsome, and at the same time healthy, Highland costume of Scotland, with bare knees and calves has become quite common in many districts; indeed almost the fashion. Why should not a similar result be possible with respect to the much more healthy, more practical and more elegant sandals for children. It is only necessary in such matters, to make the first attempt with energy.

Once a fashion has been established, no one sees anything surprising or striking in it; on the contrary, every one follows it.

Let those who wish to bring up their children healthy and strong pay no attention to the wondering looks of a silly public at the first introduction of the fashion, but make practical use of this suggestion their children will derive benefit and enjoyment from it. I know of no article of dress more practical, pretty or appropriate than this for the seaside, for instance, where children are continually getting their shoes and stockings wet.

As to the provision of such sandals, any shoemaker will be glad to make them to order. The best material would be cork, with a leather under-sole; and they should be fitted to the foot as it rests on the ground, and for firmness sake they should be provided with a small heel-piece. I would above all recommend the so-called "health-shoe," or "Paradise-shoe"; because it may be worn everywhere without attracting notice. If this shoe cannot be obtained on the spot, it may be had in my Sanatorium, as may also the sandals.

Those parents who cannot make up their minds to let their children adopt this useful fashion of sandals, should at least let them go barefoot in the house as much as possible; and give them in summer low shoes made of light material (silk or linen) for out-of-door wear, *without stockings,* such as are worn by women and children in Brazil. These shoes would have a very pretty effect and be most conducive to health. They were once the fashion for children; for we read in "The Journal of Luxury and Fashion," published in England in the year 1803, it was the universal custom for children to wear no stockings. What was at that time the fashion could again be introduced for the benefit of the children. Will no one venture to make the attempt to introduce it for the children's sake?

Childlessness, see "STERILITY".

Children's Cholera, see "CHOLERA, INFANTILE."

Children, Hints as to Care of, see Index.

Children's Steam Baths, see Index.

Children, Want of, see Index.

CHLOROFORM is a fluid consisting of alcohol and chloride of lime, producing anesthesia when inhaled (it is usually poured on a pocket-handkerchief and held before the nose). It is frequently used by physicians and surgeons in painful operations, in order to deprive the patient of sensation and consciousness.

As it generally has unpleasant after-effects as nausea, sickness, headache, etc., and as fatal results may come from its administration in case

of carelessness on the part of the operator, of weakness of heart on the part of the patient, this anesthetic should only be resorted to in really serious cases.

Ether is also frequently used as an anesthetic. On the whole it may be considered a more harmless drug, as its use is not attended with so much risk in the case of disease or weakness of the heart. On the other hand it has the disadvantage that the anesthetic effect is produced more slowly.

Chlorosis, see "GREEN SICKNESS".

CHOLERA. By cholera (Asiatic, or rather Indian) we understand that virulent pest which has been introduced from India and which is characterized by violent vomiting and diarrhœa, as well as by painful spasms and an extremely rapid course. This deadly pest came from Russia to Germany for the first time in 1831. Cholera is manifestly a disease of the gastric and intestinal mucous membranes. This inner lining is far more extensive than is generally believed. Commencing in the mouth and descending into the gullet it coats the stomach, the duodenum, jejunum ilium, cæcum, colon and rectum.

Thus, all these connected tubes more than thirty feet in length, are covered with mucous membrane, and they have an extent of above 2,000 square inches. This excessive mucous membrane is in every part supplied with myriads of nervous fibres, and is brought into intimate connection with all parts of the entire body by the ganglious system. On and by this membrane cholera manifests itself. In its essence and features it is nothing else but what is called diarrhœa, with vomiting in its highest degree.

ON THE NATURE OF THE CHOLERAIC ATTACK, BY *Dr. Shew.* Although the real nature of Cholera remains as yet a secret to us, we can still recognize and treat it, by and according to its effect. One thing is to be remarked. It is usually mild in its first stage. People are not prostrated, as is often averred, suddenly and without premonitory symptoms. There must exist some previous illness. When a man is in every respect in good health and conforms to good and regular habits, cholera has no power over him. Now, there are certain people who consider themselves healthy in every way and are taken by others to be so, yet who are the first victims of a cholera epidemic. Stout persons with blooming complexions, as the saying goes, are very prone to be attacked with complaints of intestines, and consequently with cholera. Such persons are in reality never in good health, and bear the germs of disease constantly with them. There is sufficient proof, unfortunately, that a really healthy man (there are only very few really healthy people) cannot be attacked by cholera. An actual attack must therefore be preceded by

a morbid condition of the stomach and the intestines—a condition which can be successfully treated in nearly every imaginable case, and by which, therefore, the ultimate advent of the fell disease can be averted.

Cholera-Symptoms:—First Stage: (by *Dr. Johnson*). The cholera-symptoms as given in books are various and manifold. As in all other serious diseases, the nature of the attack is not the same everywhere. The disease is divided by many into three stages. After a mild diarrhœa, continuing usually for a few days, it is generally slight, and accompanied with no pain, so that the patient has no misgivings whatever, but nevertheless the system is made ready for the most terrible attack, tormenting pains in the stomach and the intestines set in with a feeling of sickness and desire to go to stool (or the vain wish to empty the intestines), at other times watery evacuations take place; or a thin, slimy, blood-streaked excretion. These motions, however, are not generally accompanied by pain, as in diarrhœa, but take place so easily that the patient scarcely notices them. It is said that with enfeebled and especially with intemperate persons the evacuations are in the beginning very frequent and of a whey-like character, often producing great exhaustion, faintness, and even fainting and that, in such cases the most horrible cramps, vomiting and collapse supervene within a few hours. "Any mistake, especially any imprudence in the taking of food, drink or medicine accelerates the approach of the second and third stages in such cases. In the first stage appetite diminishes or disappears entirely and the desire for cold water increases in proportion. There also come pricking pains in the limbs, especially the calves. The patients describe their symptoms as if all the blood were going to the centre of the abdomen; they have the sensation at times of electric shocks passing through the intestines, during which a great intolerable heat is felt.

Second Stage. In the second stage almost continual vomiting and evacuation of the so-called "rice-water" takes place. This dull whitish liquid repeatedly flows in streams from the intestines and spurts from the opening, as from a pump. Vomiting is usually light and easy, and comes relatively without effort, appearing to afford momentary relief. Pricking pains also begin in the stomach, intestines, head and back, combined with violent cramp in the muscles, especially of the limbs. The pain often causes loud cries to escape even from the most brave, and the patient to roll about like one possessed. The pain round the heart, they say, cannot be exceeded by any other pain. In consequence of this cramp the patient necessarily becomes so enfeebled as to be unable to move; the trunk more especially becomes completely powerless. The pulse may be full or small and paralyzed. The skin is bathed in a viscous

perspiration, and feels like dough. Many have compared the skin in this condition to a moist hide. The face is expressive of great anguish and pain, though the mental faculties remain undiminished. Even at this stage the excretions from the kidneys often cease entirely; thirst comes irregularly—and in many cases is so great as to make the patient leave his bed and go wherever he can get water, sometimes drinking even the liquid which he has vomited before. In no disease is thirst so excessive as in cholera.

The Stage of Collapse. The so-called stage of collapse is now reached. The appearance of the patient undergoes a remarkable change. The skin gets cold and in many places blue. The lips are purple, the tongue cold and lead-colored. The hand-joints become pulseless. The breath is short, the eyes have sunk deep in their sockets; the whole appearance has become altered and cadaverous. So great is the change that has taken place within a few hours that intimate friends can no longer recognize the sufferer. The face expresses such extraordinary anguish that the name "triangular face" has been applied to denote it. It is surprisingly like that of old age, and seems to arise from the pallor and sunken features, as well as the oppressed disturbed condition of mind, which gives it such an expression of extreme anguish and terror.

Dr. *Shew* says, besides: There is, moreover, a profuse cold perspiration, seeming to come in large drops from every pore, and, notwithstanding this frigidity, the patient complains of burning heat in his stomach, and asks more than ever for cold water and cool fresh air. The watery evacuations from the intestines continue, the hands and fingers are shrivelled up, white, wrinkly, and swollen, like the hands of a washerwoman after a long day's work. The voice is peculiarly hoarse and faint. At last the patient is free from pain and vomiting, and remains apparently quiet, as if calmly awaiting the approach of death. These symptoms complete what is called the stage of collapse. There is, of course, a great diversity in the features of the different cases; sometimes they make their appearance quite suddenly, almost without any warning whatever, in others they endure for days.

If, during the stage of collapse, a reaction or return of warmth and circulation of the blood sets in, there is greater hope for the patient, but danger yet threatens from succeeding fever and other local diseases, especially when medicine has been used. Great drinkers, for instance, when passing into the stage of reaction, are seized with delirium tremens and fall an almost sure prey to death. I believe that about one-half of

all cholera patients have succumbed to this disease in the course of the usual treatment.*)

There seems to be no doubt that cholera is not contagious, *i. e.* that it cannot be transmitted from one person to another by contact, or by any means coming under the head of "contagion." Its support, if not also its origin, rests on purely local causes; and a person may be attacked with it at any place while it continues to rage in the neighborhood, whether the person has been in actual contact with another already affected with the disease or not. In short, it is not the person, the clothes, or the breath of people already down with cholera, that is dangerous, but the causes which have produced and favored the disease in the given case. The former opinion that cholera was contagious exercised a disastrous influence in two ways: it predisposed nervous people for cholera and withdrew from the sufferer that attention and assistance so highly essential to him under such circumstances. Cholera hospitals should be abolished and the patients be treated in their own homes.

Prevention of Cholera. Food, healthy blood and its regular distribution through the body, is the best protection against cholera, as well as against every other disease. In order to possess healthy blood,

*) Broussain describes the external cholera symptoms in the following manner: "The muscles stand out, the eyes are hollow, dry and sunken; after a few hours the cohesion of the eyeball seems to have disappeared and we might say that the eyes are turned inward. The patient's face is fearful to look upon; it very soon loses its oblong shape and becomes contracted in a peculiar manner; but what creates the greatest astonishment is the dark blue color that spreads over the face with the advance of the disease. The limbs are cold, the tongue usually pale, cold, broad and flat; the breath is short and the pulse weak. The words are breathed more than spoken. The patient lies motionless on his back; if he is forced to lie on his side, he cannot bear it for any length of time, but prays to be put on his back again, in order that his chest may breathe freely. Whilst the body keeps thus quiet, his hands and feet keep moving, nevertheless; he denudes his chest, complains of inward fire, and tears off the warm compresses which have been put on the stomach; he turns from one side to the other, but is unable to raise himself. The color gets darker and darker, and turns blackish-yellow. It alters, however, in conformity with the patient's natural complexion; for example, negroes become black and bluish, but a more transparent skin turns yellow and assumes the appearance of bad gilding. This change of color is followed by a cessation of the pulse, a condition which I will call asphyxia. The pulse becomes rapidly feebler, and sometimes within three hours, sometimes in a shorter space, is altogether imperceptible. As soon as the pulse begins to become weak, the patient falls into the above-mentioned helpless state; there are cases, however, in which he preserves his strength after extinguished pulse, and is even able to get up and to walk from one place to another, but this fitful strength soon vanishes, and the wretched sufferer miserably collapses. After the pulse has stopped, the black color is seen to appear at different rates, sometimes after the lapse of two or three hours, sometimes earlier; it depends entirely upon the cessation of the circulation of the blood. The above is the description of the Asiatic Cholera, as given by several eminent physicians."

breathing good, pure air is essential (everyone should, if at all possible, spend some time every day in the open air, also vigorous breathing gymnastics should be practised, and sitting and bed-rooms well aired). See "Airing and Breathing Gymnastics."

1. Where a person is tied to the house, he must take several times a day for a few minutes deep inspirations and expirations in the best air that is to be had, in the garden or in the room with the window open. If he is obliged to breathe foul air, let him breathe through the nose, but rinse his mouth and nose afterwards with fresh water, and strengthen his lungs by vigorous breathing gymnastics in pure air.

2. Non-stimulating diet and especially abstention from meat and alcoholic drinks, as well as from highly spiced, salt and sour food; raw or cooked fruit should be taken at every meal. When cholera is in prospect, it is best to abandon meat diet altogether, or at least to limit it to a great extent. One of the best hygienics writes: "When a man (with cholera in sight) does not wish to eschew meat altogether, which certainly would be the best thing, he should at least limit the quantity to one-fifth of his meal, while four-fifths should consist of young, green and dry vegetables, rice, vermicelli, pearl barley, millet, crushed wheat, leguminous vegetables, potatoes. Since, however, any sudden change in our habits may produce an injurious effect upon the system, the transition must be made with caution."

3. Above all, proper care for the action of the skin; every day a 72° to 80° rubbing of the whole body with a wet coarse linen cloth or sheet and rubbing the body perfectly dry with flesh-cloths or flesh-gloves; first, arms and legs, then neck, head, chest, stomach and back. Dr. *Paul Niemeyer* and Dr. *Mayner* say very justly: "At the outbreak of cholera men should be engaged in large numbers to give not only those attacked by cholera, but also the healthy, two good wet rubbings a day, instead of having the air vitiated by the poisonous acids of so-called disinfectants. Clothing must not be too thick, but just feel comfortable. The less thick clothing the body requires, the better for it.

4. Drinking good water and breathing good air in and out of doors.

5. Daily gargling and rinsing of the nose with fresh water, and drinking some after that greatly conduce to the advantage of the mucous membranes which by this treatment are made more capable of resistance.

6. All food is to be well masticated and had better be taken cool. "Food well chewed is half digested" is a very important maxim in this disease.

7. Removal of all dirt and impurities from the house, and dirty linen, etc., from the bed-room. Remove all putrefying and decomposing substances from the premises and vicinity.

8. Avoid all medicine, powders, pills, mixtures, elixirs, cholera bitters, or drops, and other quack medicines.

9. Order and system must be strictly introduced in the time for sleep, meals, etc. Smoking, reading and any other mental occupation is to be shunned after meals; beer must not be drunk cold, and never on an empty stomach; the stomach and abdomen must be kept warm; if a person thinks he wants an extra covering, let him wear a woolen band over, but not under, his linen or cotton shirt. Daily open bowels are necessary; for constipation, see "ENEMA" and "CONSTIPATION"; also for diarrhœa. For the latter, inject after every evacuation about a gill of water of 59° to 66°. At night apply also an abdominal compress of 70°. Enemata, therefore, are not only applied to produce open bowels —as most people, even physicians, suppose—but diarrhœa can be cured by their means.

He who lives in accordance with these precepts carries the power of resistance within him, and may look on the cholera nightmare without fear.*) Alarm and fear of cholera may favor its advent by lowering the vital power.

CAUSES OF THE CHOLERA EPIDEMIC. Looking upon them as a whole, they are: dirt, stupidity, and misery. Looking at them singly, they are: insufficient care of the cutaneous action; bad drinking-water or want of it, impure air in sitting and bed-rooms, etc., over-crowding in houses, deficient sanitary arrangements; eating unwholsome and improper food, above all, indulging in spirituous liquors, strong wines, foreign spices, medicines, meat, etc.; excessive solar heat, especially where brandy is taken to counteract it; slow and bad digestion; inadequate

***) When a man has arrived at a point where thoughts of cholera dominate his mind, let him expel them by active bodily exercise and vigorous bodily occupation, for that is, and always will be, the best lightning conductor to render all dull and gloomy thoughts harmless. To effect this, it is not at all necessary to swing violently round the horizontal bar—and there are really people so great in their own opinion, as to hold it *infra dig.* to drop from a horizontal bar on to a heap of sawdust, even when no one is looking on. For such a man it is better to drive away the fear of cholera, fancies of every kind, uneasiness and loss of appetite, by swimming, gymnastic exercises, or sawing and splitting wood. Let him, who would carry on a campaign on a larger scale against the fear of cholera, take an axe into his hands as Mr. GLADSTONE did, and swing it in his leisure hours as powerfully as that aged statesman swung his, when felling trees in his own park. Work is, and always will be, one of the principal curative and health-giving remedies of the Natural Method of Healing, and of popular hygiene; it is a specific against everything that is good-for-nothing and trashy, therefore, also against the thoroughly nonsensical fear of cholera.**

mastication of the food; ardent, hot drinks, like punch, coffee, tea, etc.; contracting a cold in the stomach or abdomen; irregular mode of life; anxiety and fear of cholera. The cholera (common-shaped) bacilli (Fig. 25, p. 55) discovered by Dr. *Koch* are not the cause of the disease, but only a product and simultaneous symptom of it; they are like flying sparks —results and concomitant phenomena of a conflagration which, given favorable circumstances, may certainly communicate the fire to other parts, but which, for all that, are not to be looked upon as the sole cause of fires. Since the cholera bacilli are only the result and not the cause of the disease, our endeavors should be directed not to annihilating the bacilli, but to curing the disease. A stop should therefore be put to the enormous waste of disinfectants. The cholera bacilli die in every normal, well-regulated stomach, supposing they should really get in.

PREVENTIVE TREATMENT OF THE PREMONITORY SYMPTOMS OF CHOLERA (diarrhœa with vomiting, or constipation). As in all other ailments, the individual constitution must first be considered in proceeding to deal with these symptoms. No healthy man is overtaken by cholera as by a lightning stroke, or unexpectedly. The approach of the disease is always betrayed by fore-running indications and symptoms. If these come in the form of light diarrhœa (cholerine)—which may either be painless or accompanied by pain in the bowels, and which generally sets in after midnight, in combination with sensations of general uneasiness in the abdomen—do not let the patient make the mistake of having recourse to coffee, tea, claret, cholera bitters, or—worst of all—to drugs. Rather let him give himself a thorough wet rubbing of the whole body with water of from 66° to 72°, taking each part of the body in turn till the whole is warm. Next let him wrap himself in an abdominal pack and have a hot-water bottle at his feet. The pack should be changed according to individual requirements. As soon as the feet become hot, they should be washed with cool water; and this should happen four or five times in the hour, during which the pack remains; on the patient emerging from the pack he should give himself another rubbing and then a small enema of water (68°) (enemata, which most people, and many doctors, consider to be only suitable for producing a motion of the bowels, are also employed to stop diarrhœa). A small enema should be given, or self-administered, without fail after every stool. If the symptoms do not yield to the above treatment, steam-baths should be taken, in the most appropriate form, and cooling off, bath, douche, or thorough rubbing, should follow each. Then should come either massage of the body or curative gymnastics in the house, or a good walk out of doors.

The process should be repeated on the following day, omitting the enemata. The object of the cool clysters is to stimulate, enliven and strengthen the mucous membrane of the intestines, as also to assist their peristaltic action, and to cleanse them. Another object of the clysters is to fill the bowel, so as to relieve the heavy pressure upon it. They also have the effect of cooling the interior; whereas water which is drunk is cut off, inasmuch as it passes at once into the alimentary canal, where it is absorbed and transferred to the portal vein system, and then becomes part, first of the minor or pulmonary, and then of the main circulation, thus at length supplementing the previously excreted watery particles of the blood.

In case of CONSTIPATION, enemata (one or two gills of water of from 68° to 90°) should be resorted to, and repeated if no evacuation follows the first, but only when it has been absorbed. This repetition may go on for one or two hours, and if still no stool results, a hip-bath should be taken—the water of from 68° to 86°, and the duration from five to ten minutes—hot-water bottles being at the same time applied to the feet, provided that the body (abdomen) feels warm. If there should be a sensation of cold in the abdomen, the hot-water bottle must be dispensed with; also in cases where heart or lung complaints, nervous weakness, etc., are present. It stands to reason that non-stimulating diet should be observed.

TREATMENT OF THE FIRST STAGE OF CHOLERA. (Diarrhœa with vomiting.) These preliminary symptoms usually set in from eighteen to twenty hours previous to an attack of true cholera. Shortly repeated, they are: slight diarrhœa, pain in the bowels, uneasiness and cold feeling in the abdomen, later a general feeling of discomfort; sickness, flatulence; pains in the abdomen; pricking pain in the limbs, especially in the calves; loss of appetite, and weakness of the eyes. In such attacks and discomfort people nowadays take refuge usually in cholera bitters or other alcoholic remedies, or in actual drugs, such as opium, etc. This, however, is utterly wrong, because not only is nature, which was just going to work to excrete the morbid matter existing in the digestive organs, hindered in her efforts, but the digestive organs are thrown into a worse condition. Hence the frequent remark that through this perverted treatment light cases become severe, an eventuality which ought never to occur with proper handling. The patient should take in the first place a small (59°) enema, later (54°), less than a gill for adults, less than half a gill for children according to age, and a stimulating compress on the abdomen (temperature of the water 50° to 54°) should be put on at once; then to bed. A steam compress on the abdomen

will also be of great service. The compress should remain on till dry, about three or four hours, and then be renewed. The compress should not be kept on if the patient does not like to be in bed, but wants to walk about; in that case, a wide woolen belt (cholera belt) should be worn round the abdomen to warm it; and this should be changed for a compress when the patient lies down. Instead of the compress on the abdomen a vigorous cold wet rubbing of the whole body may be given, followed by a dry pack, kept on till perspiration, however slight, takes place.

If the bowels are opened by the first enema, or if the latter is discharged alone, a second one should be given in five or ten minutes; if the enema is retained and the bowels are not opened, half an hour should be allowed before a second enema is administered, unless the bowels are opened sooner. (See "ENEMATA.") This mode of treatment should be continued till the evacuations assume their normal character, and all taint has consequently disappeared. By the cold enema the intestine is in the first place stimulated to excrete the morbid matter, and is thus completely cleansed; and in the second place it is strengthened and invigorated, and the circulation of the blood in it is increased. Besides this treatment the patient should observe a non-stimulating diet; thick oatmeal porridge, soups made of rice or whole meal with bread till digestion is restored to its normal condition, which will be the case in one or two days. If constipation is present instead of diarrhœa, lukewarm enemata (77° to 81°) should be given (half a pint or less for adults, a gill or less for infants), and another small cool enema after the evacuation. (See also "ENEMATA.") Breathing fresh pure air; drinking fresh, pure, soft water, according to the thirst. If a feeling of sickness continues, repeated draughts of water should be taken to produce vomiting and to make the process more rapid and less dangerous for the patient. Warm water is sometimes given to produce vomiting. For the rest, daily a (54° to 66°) wet rubbing of the whole body or (58° to 66°) wash-down should be given, so as to get the whole body into a glow, when the patient should either go to bed or take exercise in the fresh air, the abdomen being kept warm by means of a woolen belt, as above. (For Modes of Application, see Index. For Treatment by Massage, see "TREATMENT OF THE THIRD STAGE"; see also "DIARRHŒA WITH VOMITING" under "KNEIPP CURE.") If the preceding treatment be correctly applied, it is almost certain that a real attack of cholera will not take place.

TREATMENT OF THE SECOND STAGE, marked by the following symptoms which may be briefly repeated. Cold shivering fits, occurring at

short intervals, "rice-water," rumbling, burning, evacuations and vomiting and pricking pains in the abdomen; similar pains in the head and back. Violent cramp in the muscles, especially in the calves, dry, wrinkled skin, or viscid sweat, excessive anguish and continual thirst. For further information, see "DIARRHŒA WITH VOMITING" and "ASIATIC CHOLERA, SECOND STAGE."

The principal thing now is to restore the function of the skin with the return of which the entire disease is as a rule at an end. Rubbing of the whole body, performed at once and as vigorously as possible by two, four, even six to eight persons, working in rotation, must be kept up over a linen sheet dipped in cold water (dripping sheet). When, after four or five minutes, this has become warm, it must be wetted again (the friction has to be performed over the sheet, not with it) above all, the abdomen, back, thighs and calves, must be rubbed thoroughly. If the patient is too weak to bear the rubbing standing, it must be done as he lies in bed. Duration of this rubbing according as the patient can bear it (ten to fifteen minutes). The patient must then be wrapped in a blanket which has been previously warmed, then laid on the bed and again rubbed over the blanket, especially his calves and feet. If the latter are cold and numb, as generally is the case, hot-water bottles wrapped in wet or dry linen cloths must be put to them. The rubbing, however, is always to be continued. After the lapse of from five to ten minutes the same process with the dripping sheet, and then with the blanket, to be repeated; then again the wet rubbing (which may be taken a little colder) and the dry one, and so on. After every vomiting the patient, plagued with unquenchable thirst as he is, must be allowed to take sips only of quite fresh water, and a small cool enema should be given after every stool. After one, two or three courses of such treatment—during which enemata according to treatment indicated in the first stage must not be omitted—a favorable turn in the condition of the patient is nearly always brought about; if not, the rubbings constantly changing from wet to dry must be gone on with till a good result is obtained, even if it should require a whole day or a whole night. When the skin begins to redden and shows traces of perspiration, when diarrhœa and vomiting abate, then the neck of the disease is broken. The patient is then (see above) put to bed with the abdominal pack—the warmth of the bed being ensured—and an enema given occasionally after a stool. If the patient is thirsty, he should have fresh, pure, soft water to drink, as much as he likes. When the appetite returns, thick soups, rice, porridge strained through a hair-sieve, and the like, should form his diet.

The wet rubbing may be given (without the sheet) with bare but warm hands—repeatedly dipped in cold water—to the patient either standing upright or lying at full length on his bed, a dry rubbing over warmed blankets following each wet one. If the body does not soon get warm during the rubbing, hot compresses or steam-baths should be applied, while the rubbing is kept up energetically for fifteen or twenty minutes, according as the patient finds them beneficial or endurable; and, in addition, steam-baths in bed (five hot-water bottles wrapped in wet cloths, laid round the body of the patient) may be given and continued as long as needful, and, after them, wet rubbing, as above. After the wet rubbing the patient should be dried and well covered up in bed; or he may have a bath, as hot as he can bear it, and, after the bath, a cold rubbing with a rough cloth, and then be put to bed. The hot-water bath is preferable to the before mentioned steam-bath. Frequent gargling and rinsing of the nose are also very beneficial. When the skin is hot and feverish, a soothing full-pack with one, two or three hot-water bottles to the feet should be given, and changed as soon as it becomes hot, or, if the patient finds it oppressive, until the fever decreases. If there be pain in the abdomen, efforts must be made to subdue it by soothing or warm compresses, or steam compresses on that part, or by warming with dry woolen bandages, and cold sweats must be relieved by tepid washing; fresh air and occasional cold enemata will be necessary in all cases.

Besides this treatment foot- and half steam-baths are applicable, as well as steam-baths in bed, unless the latter prove troublesome to the patient; their duration depends on his feeling with regard to them. With headache and cold feet, hot compresses, as hot as the patient can bear them, should be applied to the feet, and cold ones to the head, or a foot steam-bath, or hot foot-bath, followed by cold wet rubbing. Cold douches and shower-baths, after which the body is to be well rubbed, are of great advantage in cholera. For pains in the abdomen and constipation, short cold hip-baths with friction of and kneading the abdomen, may be given, if the patient is free from heart complaints, the upper part of the body, the calves and legs being rubbed for about ten minutes during the bath, unless a stool intervenes, in which case the hip-bath must at once come to an end; drying and vigorous rubbing of the respective parts should follow the bath, and then the patient should return to bed. When the body is completely warm, the above mentioned compress should be put on once more, and an enema given. In many cholera cases two or three hip-baths, and from fifteen to twenty enemata may be required in the course of a

day. For Modes of Application, see Index. For treatment by massage, see "TREATMENT OF THE THIRD STAGE."

It is certainly preferable to have the advice of an expert well versed in the Natural Method of Healing, provided one lives near enough to give the different directions as required in each case. His assistance will not be needed, however, if prompt and vigorous measures are taken in accordance with the foregoing directions, on the appearance of premonitory symptoms. If diarrhœa and vomiting make their appearance, the administration of enemata and conformity with the advice given in the chapter on "PREVENTION OF CHOLERA" will be quite sufficient in nine out of ten cases to ward off the disease. (See also "CHOLERA" under "KNEIPP CURE.")

Unless the patient is speedily restored, he passes into the third stage.

TREATMENT OF THE THIRD STAGE (stage of collapse), of which the characteristics may be shortly recapitulated, as follows: A remarkable change takes place in the patient's appearance, the whole body becomes icy cold, vomiting and diarrhœa cease; the pulse is a mere thread; the weakness is extreme, the nails and teeth assume a bluish tinge, and the lips a purple red; there is great difficulty of breathing, intolerable oppression on the chest, the voice is soundless and hoarse; complete collapse, fainting and death ensue. Some cholera patients die in one or two hours, some only after twenty-four, or even thirty-six hours' illness.

The treatment is to be continued here as given in the second stage; but recourse should be had speedily as to baths, hot and cold by turns, as hot as the patient can bear for from six to eight minutes, and quite cold for two minutes. When in the latter, the patient must be energetically rubbed with rough flannels, and the body should be gently, but firmly, kneaded. Instead of the cold bath, a cold powerful shower-bath may be given, or the expedient adopted of dashing or quickly emptying a pail or similar vessel of water over the body.

TREATMENT BY MASSAGE. This is most important in cholera; it consists in vigorous friction of the entire body. The parts affected with cramp are to be energetically rubbed and kneaded with the hands, which are dipped in cold water, and the feet must be bent if the cramp is in the calves.

In so-called "Dry Cholera" (Cholera Sicca), which in most cases proves rapidly fatal, in consequence of the accumulation of fæces in the alimentary canal, and of urine in the bladder, resulting in uræmia, or blood-poisoning by urine—it is essential to apply hot compresses, or steam compresses, to the body and abdomen, simultaneously with hot-

water bottles to the feet, and, if possible, half, trunk and hip-baths, in which the patient is to be handled as above described, including the administration of enemata. Though this latter remedy has an extraordinarily high value in all the stages of cholera, its employment in this form of the disease is of special importance. The temperature of the water used should be from 66° to 77°; or, under some circumstances, 100° and upwards.

It may be here remarked in passing, that pieces of ice have often been used in cholera instead of cold water.

In Leipzig, in the year 1866, according to statements in the local papers, experience proved that the mortality among cholera patients treated medically was exceedingly high, and that a very favorable contrast was presented by the comparatively low percentage of fatal cases among those in which the Natural Method of Healing was carried out —in the forms of rubbing, packs, enemata, baths, light vegetable diet and drinking water. The above mentioned Dr. *Meyner* was at that time—although then quite a young physician—director of a cholera station in Leipzig, and he had the gratification of seeing the great majority of his cholera patients recover with this treatment.

The physician *P.*, being asked by a colleague, how he treated cholera patients answered briefly: "I let them drink water and have them well rubbed (with wet sheets), and when the peasants ask for physic I prescribe raspberry syrup. I have obtained capital results; till now, out of forty patients, only two have died, notwithstanding that they all lived in badly situated houses. On the other hand, the district physician, who doses his patients heavily with opium, loses nearly half of them."

PREVENTIVE MEASURE AGAINST CHOLERA ON THE PART OF THE STATE AND LOCAL AUTHORITIES.

As the present regulations or preventive measures of the State local sanitary authorities against cholera are mostly insufficient, and sometimes irrational, the author suggests the following regulations, when cholera is in prospect:—

1. All disinfection of closets, sewers, cesspools, drains, etc., to consist in keeping them clean and sweet, flushing them frequently with water, etc.; public cleanliness, frequent scouring of rooms, and such like, should be insisted on. Where no facilities for flushing with water exist, the closets must be kept free from smell by putting fine ashes, whether of wood or coal, into them; the ashes should be moistened previously to prevent their causing dust. This process may take place two or three times a day. The use of carbolic acid for purposes of

disinfection must be deprecated on the ground of its not being proved that micro-organisms in the air are destroyed by it, whilst, on the other hand, physicians have testified to the poisonous effects upon man and beast through breathing carbolic acid, and even cases of death have been proved to have taken place through it. It is also known that the public minister of railways, Herr *von Maybach* has long ago prohibited the use of carbolic acid to disinfect cattle trucks, because calves and pigs died in such trucks.*)

2. First, and foremost, attention to the skin; daily (72° to 77°) full washing or full rubbing, or a (86°) bath or full bath.

3. The provision of good drinking water; pumps and wells which contain impure water should be closed.**)

4. Abundance of good pure air out of doors and in the house.

5. Repeated airing of sitting and bed-rooms, obtaining a good current by opening doors and windows for a time. In factories, schools, etc., besides ventilation and repeated airings, provision should be made for renewing the oxygen of the air by sprinkling fresh water with a large syringe every three hours on hot days.

6. Exposure of sitting and bed-rooms to the rays of the sun.

7. People should be warned in times of cholera against the danger which they occur by indulging in strong alcoholic beverages, especially brandy, strong wines, liqueurs and such like, or in an unsparing meat diet. The sale of spirituous liquors should be restricted.

8. A closer supervision should be exercised regarding the cleanliness and the flushing, etc., of water closets, urinals in public institu-

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*) Neither by the disinfection of manure-pits, carried on in the fashion of the present day, nor by disinfection and fumigation of clothes and people, nor by quarantine, or other preventive measures, of whatever description they may be and under whatever designation they may be known, will the State and local authorities obtain the desired result, and why? Because in the eager search for something suspicious, one spot, as usually happens in a search—the spot on which, of all others, the most suspicion should fall, the kernel of the question—has been overlooked—personal disinfection—attention to the action of the skin, care for wholesome air and the digestive organs, moderate living and good mastication.

**) Where reliably good drinking water cannot be obtained, that which is used should first be boiled, and then poured through a perfectly clean tin strainer, over which a clean-boiled piece of linen has been spread. It may then be used in the preparation of food. The water used for drinking should be poured, after having boiled a second time, through a sieve, in which there are ten grammes of ground coffee, or one gramme of tea to every ten quarts of water. A still more harmless and aromatic filtering medium are dried strawberry or currant leaves, five grammes to every ten quarts. This is done to improve the insipid taste of the water. This beverage should be kept in closed stone jars in a cool place; and the supply must be kept up day by day by adding fresh boiled water. (See Figs. 31 and 33, on page 58.)

tions, railway stations, schools, hospitals, etc.; also in respect of slaughter houses, soap works, game and poultry depots, skin and rag shops.

Such regulations or preventive measures are cheap, but effective, and if carried out by the State or local sanitary authorities, they will be credited and willingly obeyed, and much misfortune will in consequence be prevented. The State and local authorities should not only at the time of cholera, but at all other times, enlighten the people as to the principles of sanitation, so that a correct view of the subject may prevail. Not only cholera, but every other disease, would then be effectually prevented.

Here follow the opinions of some men of great authority in favor of a non-stimulating and meatless diet.

Professor *Sylvester Graham* says: "Nearly four months previous to the appearance of cholera in New York (in the year 1832) I publicly lectured there on this disease, and made the assertion that total abstinence from flesh food and meat soups, from all alcoholic and narcotic drinks and any kind of irritating condiments, as well as the observance of strict general order with regard to sleep, bathing, dress, exercise, satisfying our natural passions, etc., would be the surest means to evade an attack. I repeated this lecture when cholera had already appeared in the city, and in spite of the powerful opposition to the views I promulgated, a considerable number of citizens were not prevented from strictly following my advice. And it is a fact that of all those who throughout and in every respect adopted the mode of life which I had recommended, not one fell a victim to this terrible disease, and only a very few showed slight symptoms of it."

Dr. *A. Pollard*, speaking of the same period, says: "During last summer, and especially during cholera, my avocations required my whole time, and I often felt quite exhausted for want of rest and sleep. Still, throughout the entire epidemic, I had daily only a pound of coarse, unleavened wheaten biscuits, fruit, and spring water, and I experienced no disturbance in the stomach or intestines, but enjoyed far better health than for the last fifteen years. I gained also several pounds in weight during the cholera time. When I look over the notes of the cholera cases which I treated, I find that in a great many cases the cause of the disease was an intemperate mode of life, or could be referred to a palpable dietetic fault. I am now speaking of patients in the hospital as well as in my private practice, and I always found that every person who strictly and correctly observed such simple diet under a well regulated general regimen, not only escaped cholera, but enjoyed excellent health all round."

Dr. *M. Rees,* whose practice and successes are scarcely surpassed by any other physician in New York, declared that cholera in this city raged chiefly among the great meat-eaters; and, convinced of this, he begged his family to abstain entirely from meat during the epidemic. Thus he lived during the time of cholera, with his family, solely on fruit, vegetables and milk, without having a symptom of the disease. Only his wife, who, towards the end of the epidemic, partook of some meat without his knowledge, was attacked by diarrhœa some hours after. Dr. *Rees* had recommended all his friends to abstain from meat, and none of those who followed his advice were attacked by the disease. In 1832 there was no greater medical authority in New York than Dr. *Rees.*

Dr. *Johnson* rightly remarks: "The point is not to obtain coal, but to get rid of it.' The heart beats without cessation night and day, it never slumbers nor sleeps; it is the most remarkable instance of perpetual industry in the world, and all its work is only performed to send the dead, deep red blood to the lungs to be purified and freed from its coal and then to further again the living, organized blood, to bestow vital power upon every point in the human system. If an enemy came among us, and published a number of dangerous proclamations to destroy and to exterminate men, especially to make them bilious, jaundiced, and predisposed for cholera, I am quite sure, he would first and foremost enjoin the indulgence in meat and intoxicating liquors. In cholera and consumption the blood is surcharged with carbon, and the same is effected by partaking of alcohol and fat."

CURE OF A CHOLERA PATIENT IN THE WORST STAGE.

When first learning, years ago, from the newspapers that there existed a society for the spread of the Natural Method of Healing, the members of which consisted chiefly of artisans and small tradesmen, I could not help laughing—I shrugged my shoulders compassionately. Do not the most celebrated authorities of medical science very often stand powerless by the side of the sick-bed? Is not a long, wearisome study at the universities and many years' experience required to gain in some measure only an insight into diseases? And here are a number of men, honorable, but in no way connected with learning, who come forward with the motto: "Everyone his own physician"!—

It served those presumptuous persons quite right that Prof. *Bock* availed himself of his privilege in the "Gartenlaube"* to speak of a new swindle. How could I possibly trouble myself about the principles of a

*) A German weekly periodical, devoted to light literature.

system erected by those "friends of the people" after the dictum of so high an authority! It could not be anything but humbug and swindle, this thing popularly called "Meltzerism" after the name of the society's president who passed for the inventor of the theory.

The year 1866 brought the cholera besides the terrors of war; to avoid the plague I went to live with my family in a neighboring town. On the second day of my arrival there my eldest little daughter sickened of diarrhœa, accompanied with vomiting. The best recommended physician was called in. He was one of those "sensible" physicians who do not ascribe magic power to medicine, and he, therefore, adopted only a rather expectant treatment. He was very sympathizing, came five times every day, and on the sixth day the child was dead. At the coffin I thanked him for the sacrificing pains he had taken, which I am sure he would have doubled if he could have helped the child.

But everything is powerless against the destructive force of this disease. That the child with despairing expression of countenance had night and day asked for "water, cold water," had never been thought worth noticing. Some time after, I related to a young man, who was named "Sanitätsrath" the course of my daughter's disease; when he expressed the opinion that it was the greatest offence against instinct not to have complied with her desire for water. The imploring request "water, cold water" had, as it were, always pricked our conscience, and this remark confirmed only too strongly our own opinion. However, I tried to deride steadfastly any further explanations of his about the Natural Method of Healing, but confessed to myself that I considered everything he said really quite sensible.

The matter rested for several months, till I had occasion to be reminded of it under very sad circumstances.

Cholera kept always demanding fresh victims. All at once the too well known symptoms appeared in my wife. Having the family doctor at my side this time, who directly proceeded with opium, my entire confidence was centred in him; but nothing could stay the fatal progress of the disease. Cramp in the calves set in, the hope of saving her life had vanished, the physician gave "orders to be observed after death".

All was lost! Then it was the thought struck me: an attempt with the Natural Method might yet be made! There was nothing further to risk. The Sanitätsrath came accompanied by a student of medicine. Fate would have it that he was a pupil of Professor *Bock*; he had made himself acquainted by degrees with the principles of the Natural Method of Healing, and stuck to them in spite of the mocking derision of his colleagues.

The body of the patient already felt quite chilly. In consequence of the withdrawal from the blood of its aqueous constituents, it recedes to the large inner vessels, because it can no longer circulate in the capillaries by reason of its density. It was worth a trial.

The patient was placed in a bath, containing warm water (68°) to a depth of six inches; and reaction was encouraged by vigorous uninterrupted friction of all portions of the body by means of wet cloths. After an hour's heroic work the purpose was accomplished; the skin again assumed color and became warm; blood filled its veins anew. The patient was put to bed and thorough perspiration took place. The cure was complete.

The reader will understand that I did not rest quiet after this success, but that, penetrated with the principles of the natural method, I was metamorphosed very soon from an unbelieving Saul into a zealous Paul, who continues to devote his best efforts to spreading the blessing of the new and much-maligned doctrine. For the sake of completeness, I think it well to add that I have had plenty of opportunity since then of testing the truth of my conviction by self-help in my own family; and that in carrying out the doctrine, it is not learning, but logical reasoning and keen observation, that are required.

CURE OF A CHOLERA PATIENT.

By Dr. Munde.

My friend, *S. L. Hill*, called me one morning to see an Irishman named *Dowden*, who was in his service. He had sickened of cholera two days before, and now was dying. I found him almost without any signs of life; the whole body was drawn up together like a cholera corpse; the skin was devoid of blood, leaden gray, the nails blue, the fingers stiff and wrinkled, the nose pinched, the whole face cadaverous; the eyes glazed and fixed, no trace of consciousness. He had married only a month before, and his young wife stood there wringing her hands in despair. They had, of course, already given him all kinds of medicines. I asked her whether she would let me try cold water on her husband, telling her that it was the only means that offered a remote chance; but that, seeing the condition of the patient, I could not answer for the result. She said I might do what I considered best, "Poor Michael is as good as dead now as it is". I had a wash tub, cold water and some ice brought, half filled the tub, and with the help of Mr. *Hill*, a Mr. *Kelsey*, and one of my sons, lifted the patient into it, and poured ice water over him; and now we four began to rub his extremities (arms and legs) of course first and most vigorously. We dipped our hands frequently into

cold water, and every five minutes poured water over his head. Gradually his features became life-like, his eyes regained their human expression, and the skin its color. Finally, consciousness returned. He recognized us; began to utter some unintelligible sounds, then some unconnected words; at last he expressed himself so as to be understood, and began to complain about the coldness of the bath. After the bath and friction had lasted three-quarters of an hour, we took him out, dried him and put him to bed, where we left him for a couple of hours, well wrapped up. In proportion as he grew warm, the cholera symptoms set in again, cramp returned, and consciousness began to leave him again. We repeated the bath and the cold affusions, which at once restored consciousness. Towards evening it was again necessary to have recourse to them. He had a tolerably good night, but was still continually disturbed by diarrhœa. Vomiting ceased entirely. Next morning we again proceeded with affusions, and then let him lie quiet with a compress on the stomach. Towards noon he received a visit from a priest, who wanted to prepare him for death, and who advised the wife in the most impressive way to leave off the water-cure; it was a very good thing for other diseases, but not for cholera.

Towards evening, when I returned, I noticed the smell of camphor in the room, and learned that the good curer of souls had left both his counsel and his camphor, his prescription and his physic. On my asking the woman whether she had more confidence in me or in the priest, she said that she would do everything I ordered. I commissioned her to tell the priest, when he came, that I requested him to take care of the man's soul, in case he died, but that he should safely leave the body to me, as I understood more about that than he. The patient was still unaccountable, and lay there like an idiot. We, therefore, continued our treatment, and the result was that *Michael Dowden* went to his work again on the fifth day, and has been well ever since. The treatment had commenced on Thursday morning, and on the Sunday following the patient had his last bath.

It is hardly necessary to warn those who have recovered from cholera not to expose themselves to faults of diet and the risk of catching cold, or, like *Michael Dowden*, to go to hard work again on the day after their recovery. *Michael Dowden* was an Irishman, and what is good for an Irishman may not be good for everybody.

Choleraic Diseases in Children, see "CHOLERA NOSTRAS."

CHOLERA, INFANTILE, Diarrhoea, or Dysentery, with Vomiting, is the name given to a catarrh of the stomach and intestines with which children during their first two years are sometimes attacked. Those who

have been brought up by hand are more liable to it than those who have had the breast; and it usually occurs during the summer months.

Symptoms.—It begins with vomiting of clotty, acrid, and rank-smelling matter, which, later, becomes more fluid. (When children, who are being nursed by their mothers, bring up the milk again in clots, that is a different thing altogether; such retching babies are anything but wretched; not like those brought up on artificial food.) The vomiting is accompanied or followed by thin and almost colorless evacuations, which evidently cause pain; the thriving infant seems to waste away completely; its plumpness vanishes in a surprising manner; the eyes lie deep in their sockets; the face looks old, the nose is pinched and cold; the skin on the inner side of the thighs becomes flabby and hangs in folds; the skin at the back of the thighs down to the knees becomes sore from the thin, "rice-water" evacuations. Later, violent motions occur in quick succession, discharging dark, putrid-smelling matter, similar to the stools which are characteristic of dysentery; the limbs become cold; the stomach is hot; slight twitchings, sleepiness, and squinting will be noticed. This acute catarrh of the stomach and intestines often becomes chronic, the child then remaining sickly and wretched for a long time.

Causes.—As already mentioned, it is principally the unsuitable nourishment given to infants, in substitution for the mother's milk, which is to blame for this complaint. The infant's stomach cannot digest these paps and other indigestible foods. Uncleanliness of the vessels in which the milk or other food is kept and administered, and of the india-rubber teats and tubes of feeding bottles, or of teething "comforters," is also a frequent cause of such attacks.

Treatment.—Where the feeding has been artificial, it will be best that milk should not be included in the diet for two or three days, but that oatmeal gruel should be given instead, in order that the digestive organs may recover their tone. Two table-spoonfuls of meal to a pint of water boiled down to half the quantity, and strained through a fine hair-sieve or linen cloth. Then diluted cow's milk may be given, with oatmeal gruel (made as above) or the child may take the breast. If a difficulty should arise in consequence of the child evincing no inclination for the breast, perseverance will conquer it.

As a general rule, in this complaint warm (104° to 108°) full-packs or steam-compresses, laid on the abdomen, should be applied, and changed about every five minutes; and this treatment should be continued till an improvement takes place. In the case of a child, it is succeeded by a stimulating abdominal pack with calf packs; while, if the patient is an adult, a steam-bath, or steam-bath in bed, followed by a wash-down of the whole body, would be more suitable, when the acute stage is past. Light, muci-

laginous diet, oatmeal or coarse wheatmeal (whole-meal) gruel, made as above directed; etc.

Small luke-warm enemata about 64 degrees, to be retained in the bowels; one or two spoonfuls for a child, half a wine-glassful for an adult. If the diarrhœa continues, the contents of the bowels must be washed out by more copious enemata of water, about 88 degrees; half a pint for a child, or about a pint and a half for an adult. If a stool ensues, or the water returns, a retentive enema should be given without fail. These last may be given two or three times a day, as a tonic to the intestine. If the strength of a child patient should fail completely, injections of starch, or, in very severe cases, of the milk of almonds, may be given. (See also "CONSTIPATION." For Modes of Application, see Index.)

DIARRHOEA, ACCOMPANIED WITH VOMITING, IN INFANCY.

(From a lecture by Mr. H. CANITZ, Natural Healer.)

Among the causes of infant mortality in large towns, diarrhœa with vomiting, or children's cholera, occupies a prominent place during the summer months. It appears to come quite suddenly with the symptoms of violent vomiting and diarrhœa, and to lead in many cases to speedy collapse and death. If the above-mentioned symptoms already point to the digestive organs as the seat of the disease, the indication becomes the more conclusive, when we see that the disease prevails chiefly among children who are being reared artificially; although those at the breast are not exempt from it.

I.

The following may be the main causes:

1. IRREGULARITY IN THE HOURS OF FEEDING. Many mothers tender the breast as often as the child cries. They forget, that the milk taken not only has to be digested, but that the digestive organs must also gather strength for their next effort. The more frequently food is taken, the more frequently a considerable flow of blood to the stomach and the intestines is induced. This leads by degrees to a congestion in these organs; to a redundance of blood in the mucous membranes, to a condition commonly characterized as catarrh. Flatulence, constipation, spasms, are its symptoms. If to these, fresh causes of irritation are added during the summer months (milk turned a trifle sour, or any injurious food), the long-prepared diarrhœa makes its appearance suddenly. In feeding a child, the mother should not be guided by its cries, but by the clock. Two hours at the least should elapse between meals. The nursing mother should not

neglect to wash her own breast, and the infant's lips, carefully after giving it nourishment. The milk, used for artificially feeding a child, must be quite fresh from the cow; or, if not fresh from the cow, it should be boiled for a long time, so that all germs of fermentation are destroyed; the feeding bottles should be kept most scrupulously clean—it will be the best that two should be in use, so that one may lie for a considerable time in clean water before it is again required.

2. Too RICH NOURISHMENT. Even thoroughly healthy children can only bear their mothers' milk for a time, if it is too rich. Cow's milk should be greatly diluted at first (one part milk to three or four parts of water), so as to be of whey-like consistency; most to be recommended is a mixture of well boiled cream and water (for the first week or fortnight) in the proportion of one to four (one tea-spoonful of cream to four of water), after that time of one to three; a little corn-flour may be added later. It is impossible to furnish a fixed scale; in artificial feeding, particularly, practice is often better than theory.

3. Too MUCH SUGAR IN THE NUTRIMENT has the effect of a great irritant. Rather give too little than too much, and not cane, but milk sugar.

4. GIVING SOLID FOOD (bread, chopped meat, etc.) before the child has the necessary teeth for it. With the appearance of the teeth the salivary glands first attain their full development; and only then can the stomach act sufficiently on the almost entirely unmasticated food which, if undigested, forms a very injurious dead weight for the body.

5. TAKING NOURISHMENT TOO WARM. The milk, flowing from the natural source (the mother's breast) has a temperature of about 95°; and no artificial food above this temperature should be given to an infant. But it is not sufficient that the mother, who is used to food at 121°, should taste the milk, or hold the bottle to her eye, but testing by a thermometer is absolutely necessary.

6. NEGLECT TO ENSURE THOROUGH ACTION OF THE SKIN. The accumulation of blood in the digestive organs, which faulty nutrition engenders, results in an improper distribution of blood throughout the entire system. The consequence is that such children have cold hands, cold feet and skin. Cool baths and washings are the best means of setting right the distribution of the blood. The first baths may have a temperature of 95°; but after a week they should be less warm by two or three degrees, and after a fortnight again another degree or two cooler, and so on; until, after the second month, they are not above 88°. With higher temperatures the blood-vessels will be distended, stagnation and obstructions will arise in the circulation, the little heart will be overtasked and strained, yet still unable to effect an equal distribution of the blood.

7. Want of pure air. Only the purest fresh air can so effectually oxygenate the infant's blood, as to keep off all fear of any disturbing change in its composition.

8. Vaccination, by its weakening effect upon the system, and by its deteriorating influence upon the blood, certainly contributes not a little to induce this diarrhœa and vomiting. It is, therefore, the duty of parents so to strengthen the little body some time before, as well as after, vaccination, by abdominal packs at night, as to ensure it against any serious harm.

With regard to the treatment, the main point is to remove the cause of the complaint; to give the child as little food as possible; in artificial feeding no milk, but thin oatmeal gruel (made as above directed), thin corn-flour, and similar food. For the tormenting thirst, fresh water given in tea-spoonfuls is the best palliative. After every motion a small (three large spoonfuls) cool water-enema (66° to 68°) or a starch-enema, in like quantity, should be given; most scrupulous cleanliness of bottles, clothes, and bed linen must be observed. Abdominal compresses should be applied once a day, and changed as soon as the child gets hot and restless—in from half an hour to an hour and a half; after the abdominal compress, three steam-bottles (beer-bottles, wrapped in wet cloths) should be placed, one crosswise at the feet, and one on each side—a form of steam-bath which may last from an hour to an hour and a half; then the little body should be well rubbed with water of 79°. It should receive every day without fail a wet rubbing (79°) in the morning; and a second, if its condition renders it desirable, in the evening.

But here, as in all cases, "Prevention is better than cure." (For Modes of Application, see Index.)

CURE OF DIARRHŒA, ACCOMPANIED WITH VOMITING.

The following case shows, how the Natural Method of Healing can bring salvation even at the last moment.

Among the many letters which I have received from grateful persons is the following, which on account of its utility I will quote. The reason why I do not do so as a rule, is that we do not want to attract people to us by flaming reports, such as accompany every secret remedy; though any practising representative of the Natural Method of Healing might bring forward more splendid testimonials than these privileged dealers in secret specifics, to whom our superstitious public listens; no, we wish to lead humanity by enlightenment and by conviction to the Natural Method.

The letter runs thus:

"...My child falling ill of diarrhœa with vomiting when eight weeks old and constantly wasting away during the next four months, so that

several physicians predicted its imminent death, I availed myself of your professional assistance, and since the commencement of your treatment matters assumed a hopeful aspect. It is a splendid child to-day, causing us, in spite of the troubles we had with it—nay, by reason of that trouble—all the greater joy, and we thank you for it from the bottom of our hearts.

H. Dietz, organ-builder.

CURE OF INFANTILE CHOLERA IN ITS LAST STAGE.

By O. WAGNÉR, Director of the BILZ Sanatorium, Radebeul-Dresden.

On the 28th of July, 1895, Herr *Krebs*, of M...., near Leisnig, a farmer, requested me to go with him to see his child, aged six months, who, he said, was very ill. During the drive to his house, Herr *Krebs* told me, that the above-named malady was prevalent in the neighborhood, and that a great number of children had died of it; that his child had been attacked by the malignant disease and been given up as beyond the reach of succor; that all the remedies employed had been ineffectual; that in the last week the child had been given laudanum, and a table-spoonful of brandy every day (to a child six months old!); and even that had failed to stop the diarrhœa. On my arrival the appearance of the little patient gave me the impression that my help had come too late. The body was a mere frame-work of bones covered with loose skin; the face was wrinkled and old-looking, the eyes dull and lustreless, half obscured. The whole body was cold to the touch, particularly the hands and feet; the pulse thin and thread-like, often scarcely perceptible; in short, the whole appearance was the reverse of reassuring. On enquiring what nourishment the child had had, I was informed that, besides pure milk, milk and water, and cream and water, trials had been made with almost all the artificial foods for infants, like Nestle's food, arrow-root, etc., but that not one of them had proved suitable.

I ordered: enemata, half a pint of water (90°), to clear out the bowel of its contents, and to be given morning and evening; if the water returned, starch-water clysters, one table-spoonful (about 64°), were to follow the enemata as a tonic for the bowels. A warm bath (97°) lasting five minutes was to be given morning and evening, and followed immediately by an abdominal pack, with calf packs (77°), the whole body being wrapped in warm blankets, and hot-water bottles applied to the feet—this pack to last from one and a half to two hours, and to be followed by a washing of the whole body with water of 77°. The diet was to be oatmeal gruel without milk, and given a tea-spoonful at a time. On visiting the child two days afterwards I was very glad to find it still alive. The vomiting had ceased,

the diarrhœa diminished, the eyes were clearer,—a sign that the vital power, supported by the proper means, had got the upper hand in the battle with disease. The only change I made in the directions was that only one cleansing enema was to be given daily, instead of two, and that rice water was to be the diet instead of oatmeal gruel. This agreed with the child very well. On my third visit, two days later, the child could be regarded as saved. There was no more vomiting; stools took place three or four times a day, still rather thin, but more paste-like in its consistency than before; sleep and appetite were good, appearance fresher. From that time the enemata were given up; a cool (82°) washing of the whole body was ordered once a day, and an abdominal pack with calf packs, of 77° every night; the diet was more nourishing, consisting at first of oatmeal gruel with the addition of a few spoonfuls of new milk unboiled, and by degrees an increased quantity of milk till the proportion was reached of half milk to half gruel. This regimen suited the child exceedingly well; it throve accordingly; at the end of a week it had thin whole-meal (wheat-meal) soup twice a day, and at the end of a month it had gained six pounds in weight.

The child was saved by the timely and correct application of the Natural Method of Healing; while, in more cases than one, children in the same neighborhood were carried off by the disease under circumstances which included nourishment with artificial foods for infants and treatment with opium and cognac.

CHOLERA NOSTRAS is diarrhœa, accompanied by vomiting. In aggravated cases it is called *English Cholera* (Cholera Nostras). This disease is usually sporadic at the height of summer, and is specially liable to occur with sudden changes of the weather. It comes on without any warning (often at night) with frequent diarrhœtic discharges, as yet colored with gall, pains and rumblings in the stomach with vomiting; a cramp-like sensation and spasm in the calves may accompany it. In bad cases excessive and numerous evacuations occur similar to rice water and devoid of smell, by vomit and stool. Later on the skin turns blue and becomes cold all over, giddiness sets in with noise in the ears; the face is drawn in, there is much hoarseness, also spasms and quickened pulse, up to 120 and more to the minute. It gets smaller and smaller, and in the end is no longer perceptible. The temperature of the body on the surface sinks enormously, that of the feet even to 66° and 64°. The urine is altogether suppressed, a burning dryness in the gullet and throat is felt combined with tormenting thirst and craving for cold drink. The indications of the approach of this disease are: loss of appetite, feeling of sickness, nervous oppression, rumblings in the intestines, and diarrhœa; sometimes constipation is pres-

ent. This last condition is termed cholera without diarrhœa, and is considered particularly dangerous. In this case the intestines, being paralyzed, can no longer expel the rice-water stools, hence constipation arises; these premonitory symptoms are apparently sometimes wholly absent.

TREATMENT.—As in the first stage of cholêra, page 207. For choleraic disease without diarrhœa, the same treatment as in the second and third stages of cholera, page 209—211.

The difference between Asiatic cholera and cholera nostras (English cholera) and diarrhœa with vomiting is that in the former the above-named symptoms occur more suddenly, and their course is more rapid and more fatal; the dreaded cholera without diarrhœa is more frequent in the Asiatic than in the other types. The different types of cholera are thus one and the same disease, alike in their symptoms and only strikingly different in the course they run. The dreaded danger of Asiatic cholera lies mostly in the external circumstances, under which it appears (extreme heat, bad air, bad drinking water, lack of water, the crowding together of large numbers of people in unhealthy habitations, etc.).

Cholic, see "COLIC."

Chronic Affections, see "BAD HEALTH."

CHRONIC DISEASES are lingering, constantly recurring, intractable affections: The increase of vital force, brought about by the strengthening or regenerative treatment, sometimes after a lengthy period produces a feverish condition easily curable by the natural method, and with the cure of which the chronic complaint also disappears, and more perfect health results. Recovery often takes place slowly and without fever. For the exact period at which a disease may be said to become chronic see "ACUTE DISEASES."

I subjoin a short article from "THE NATURAL TREATMENT OF DISEASES" by *H. Canitz* and *W. Siegert*.

At the close of our remarks the urgent warning may find a place not to overdo the treatment of chronic diseases. Conditions which have taken years to develop cannot be removed in a few days or weeks. Proceeding cautiously and slowly leads in most cases to success; exaggeration on the other hand (in the number of applications as well as in their duration) jeopardizes the entire cure, and often leads to an unfavorable issue, for which the natural method, not the blundering procedure, is of course blamed. The process of assimilation must be stimulated and the strength of the patient raised in the most gentle manner by tepid baths, mild rubbings, continual foot-steambaths and steam-baths in bed, moderate massage, fresh air, and a rational diet; and only when that has been accomplished should more protracted applications, calculated more specifically

to promote the secretion (stimulating packs, more prolonged steam-baths in bed, kneading), be resorted to. Months and years pass before a plant, with its sap vitiated, thrives and blooms again; how could it be otherwise with a chronically diseased system, requiring in some cases a complete reconstruction? The Natural Method of Healing supplies a safe and speedy cure in acute diseases; it leads the chronic sufferer slowly to recovery; and where his vital force is not completely gone, and when no destruction of vital organs has yet taken place, the patient must not in even apparently desperate cases lose courage and hope, let the disease bear what name it may. If there be any method of healing, capable of attaining its object, it is ours, for, unlike all others, it has for its maxim:

"Obey nature!"

Circulation of the Blood, see "BLOOD, CIRCULATION OF THE."

Clavus, see "CORNS."

Clay Salve, see Index.

Cleft Palate, see "HARE-LIP."

Cloak, Spanish, see Index.

Clothing, see Index.

Clothes on Fire, see "BURNS."

Clothing, Jaeger's System of. See "JAEGER'S SYSTEM."

Club Foot, see "ORTHOPÆDIA."

Climacteric (Women), see "WOMEN, DISEASES OF".

Clyster, see Index.

Cockroaches, see "BLACKBEETLES".

Coffee, see Index, also "BILZ MALT COFFEE".

COLD, A. This consists of an inflammation of the inner mucous membranes, *e. g.*, of the nose, throat, larynx, lungs, stomach, etc., arising from a sudden suppression of the functions of the skin and consequent retention of poisonous excretory matter in the blood.

CAUSE.—A sudden change from warm and dry to damp, cold air. This is the reason why most colds are caught in spring and autumn. Damp clothes also frequently cause colds.

Catarrh arising from over-fatigue is more correctly described as an inflammatory disease.

TREATMENT.—Colds are most effectually got rid of by diaphoretic treatment, to restore the suspended functions of the skin. Either a

steam-bath in bed or a box steam-bath should be given, followed first by a full pack and then by a wet rubbing or bath. Curative gymnastics may be recommended in case of a feeling of chill, especially groups four and five. Persons predisposed to catching cold should adopt the treatment given under the heading "HARDENING".

With weak or anæmic subjects this treatment must be carefully graduated and aided by a mild but strengthening diet. See "HARDENING" in "KNEIPP CURE".

COLD, EFFECTS OF EXTREME. Persons suffering from the effects of exposure to excessive cold have a pale and waxy appearance. The body is cold and hard as a stone, with rough and wrinkled skin (the so-called "Goose Skin"). The face is often distended with blood and of a reddish blue color; the remainder of the body is always of a deathlike pallor.

TREATMENT.—Great care should be taken in conveying the patient under cover, as portions of the nose, lips, ears, fingers, toes, etc., are liable to be broken away if roughly handled. The best means of transport is a sledge or stretcher and a layer of snow, or, if that cannot be obtained, some straw or hay should be placed underneath the patient. He must be taken into a cold place, but on no account into a heated room. If a frozen person were to be taken into a hot room, brought near a fire, or warmly clothed, death would inevitably result.

The clothes must be carefully cut away from the body and the patient placed on a layer of snow several inches thick. The whole body should now be enveloped in snow, leaving, of course, the mouth and nose free, and vigorously rubbed with it, and as the snow melts it must be replaced. The patient must be kept in this bed of snow till he is completely thawed and is able to move his limbs. The entire body is now carefully rubbed down with melted snow or ice, well dried and put into a cool bed or wrapped in cool blankets. A cool enema should also be given.

In the absence of snow the body may be wrapped in linen sheets dipped in ice cold water, or the patient may be placed in a bath filled with melted ice or snow. In the snow-bed the limbs will recover their power of motion in about an hour, in the melted ice-bath as soon as the crust of ice which has formed on the surface of the body begins to melt. The patient is then put in a cool bed as directed above. Instead of this process the sufferer may be carefully rubbed at the beginning for at least an hour with snow and ice-cold water until the heart begins to beat and the limbs to move; he must then be dried and put into a cool bed.

If breathing be suspended, artificial respiration (see Index) must be resorted to and smelling salts administered. The gums should also be tickled to produce coughing and the face sprinkled with water. Not until the pulse becomes plainly perceptible and evident signs of life make their appearance may the room be gradually warmed. The body should then be rubbed with moderately warm cloths or with warm hands.

Should some of the limbs still remain painful or devoid of sensation, continued cold compresses must be employed. Afterwards the course of procedure should be adopted indicated in "Frost-bite".

The following remarks of Prof. *Nussbaum* may here be quoted! "Most cases of frost-bite in the face, nose, ears, hands and feet arise from ignorance of the proper method of guarding against them. If improperly treated frost-bites may become exceedingly troublesome and loss of toes through gangrene may result. The use of spirits as a preventive is based on an entire fallacy. Cold drives the blood from the skin to the internal organs, especially to the brain: alcohol has the same effect, consequently the danger of getting frozen is enhanced by its use. A well-nourished hardened body, a determined will, and a vigorous heart are the best preventives. Damp, windy weather is more dangerous than a clear frosty atmosphere. A man in good health can bear a high degree of cold (in arctic expeditions as much as 80° below zero has been borne without serious discomfort). On the other hand, badly nourished, anæmic, pampered or timid persons, old men, children, chlorotic girls, gin-drinkers, or persons afflicted with weak hearts are liable to get frost-bitten even with a moderate degree of cold. If the cold be intense, such persons easily get tired and sleepy; stupor ensues; they lie down, go to sleep, and few of them ever wake again, though the heart may for a long time endeavor to keep the blood in motion.

The greatest danger lies in warming frozen persons and frozen limbs too quickly. Frozen and rethawed blood is the color of a wall-flower—the coloring matter has been removed from the blood-corpuscles. In this condition blood easily coagulates, and acts as a poison. If dissolved in small quantities by being very slowly warmed and distributed through the system, the latter recovers; if it, however, be suddenly inundated with blood in this state fatal results may follow. Frozen persons should consequently be brought into a quite cold room, or placed in snow, rubbed with snow or cloths dipped in ice-cold water, and thereupon put into a cold bath, the chest and region of the heart being vigorously rubbed with cold water; then, and not till then, should the patient be placed in a cold bed and covered with cold cloths, artificial respiration being induced if necessary."

COLD IN THE HEAD, or Catarrh of the nasal mucous membrane. This affection is very common and may appear in the acute or chronic form; in the latter case it is called chronic nasal catarrh.

SYMPTOMS of the acute form. Swelling and redness in the nasal mucous membrane; feeling of dryness and obstruction in the nose, inclination to sneeze; difficulty in speaking and breathing; inflammation of the lachrymal glands; and finally secretion of watery mucus.

By using a handkerchief repeatedly, the passage of the nose and the upper lip get sore and painful.

Besides these local symptoms the catarrh may be attended by more or less serious general ones, such as heaviness in the head, headache, feeling of weakness and helplessness in the limbs, want of appetite, shivering, pale sunken face. In more advanced stages, excessive thirst, accelerated pulse, rising to a hundred beats a minute, and slight or sometimes high fever.

With babies, old people and persons suffering from disorders of the respiratory organs, catarrh must always be regarded more seriously than with other people.

CAUSES.—A catarrh is principally caused by a cold, but a cold is nothing else than the suppression of the normal perspiration owing to the skin becoming chilled. The matter which should be excreted remains in the body and is deposited on the mucous membranes, especially those of the nose, to be discharged by them. This is called a catarrh. A cold in the head is therefore merely an abnormal discharge. (The same thing is to some extent the case in diarrhœa. The morbid matter in this case is deposited on the intestinal mucous membranes and nature endeavors to eject it from the body by diarrhœa.)

The disorder can also be communicated by contagion. The use of pocket handkerchiefs, bed linen and pillows belonging to people affected with catarrh, as also kissing people suffering from it, should be avoided. The handkerchief used by the patient should be frequently changed.

Other general causes are damp and cold weather in spring and winter, variable temperature, wet and cold feet, exposure to draughts, especially when heated, sleeping near a warm stove, toothache, incipient polypi in the nose, etc.

TREATMENT.—The first thing to be done is to restore the normal action of the skin. The whole body must be made to perspire evenly. A diaphoretic treatment should therefore be applied in the form of a steam-bath in bed followed by a 73° wet rubbing of the whole body, or steam-bath and full-pack, succeeded again by an ordinary or a douche bath. The complaint will usually disappear after one or two such ap-

plications. Drawing water (77°) up the nose, gargling, dry sitting and bed-rooms, plenty of fresh air and sunshine are valuable adjuncts to the treatment.

Another form of treatment is a tepid (73°) wet rubbing of the whole body, the patient being afterwards well wrapped in a blanket for half an hour (see "DRY-PACK") to restore the bodily heat. By this means the exhalations become normal again, and the catarrh or the diarrhœa disappears. Or some other diaphoretic treatment may be applied instead. See Index.

A vegetarian diet, an equable warm temperature and breathing pure and mild air are generally sufficient for recovery. In more severe cases and with fever a full-pack is given to ensure light perspiration followed by a wet rubbing and drying the body. A second pack may sometimes be given. *Siegert* in his book "Modes of Application" makes the following remarks: It is a totally erroneous idea to suppose that the regular baths and frictions must be dispensed with in case of a cold. It is just then most necessary to stimulate the skin to the elimination of morbid matter from the body instead of imposing this duty exclusively on the respiratory organs. An abdominal compress at night, together with a shoulder pack, friction in the morning, gargling with water (73°), repeated several times during the day; drawing tepid water (81°) into the nose, with moderate exercise in fresh, but not too cold air and a vegetarian diet will speedily cause the catarrh and cough to disappear. (For Modes of Application, see Index.)

COLD WATER CURE. This is practised at present only by some medical men, and by some adherents of the older method introduced by Priessnitz and Schroth, the founders of the Natural Method of Healing.

The present school of healers seldom employ cold water. They use tepid and lukewarm water (66° to 88°) for all their applications, such as baths, packs, enemata, etc., because it does not irritate as cold water does. The use of tempered water is far more agreeable to patients than cold, and the latter are now more readily converted to our Natural Method of Healing treatment than when they were always tormented with cold packs, baths, etc. It is only in certain processes of the Kneipp cure (which see) and Kuhne cure (which see) that occasional applications of really cold water are made.

The modified Natural Method of Healing, which makes use of tempered water, steam-baths, sun-baths, massage, curative gymnastics, breathing exercises, with an appropriate diet, etc., is much more effective than the former cold-water cure, though the latter, compared with the medical treatment of that day, was wonderfully successful.

COLIC. The term is applied not only to pains in the bowels, etc., without inflammation, but more particularly to a nervous disease attended with violent cutting and griping pains in the abdomen coming on in isolated attacks.

SYMPTOMS.—Severe griping, tearing, and cutting pains above the navel, in the transverse colon or issuing from the navel and tending to the abdomen, combined with sickness, small pulse, distorted countenance, cold sweats, inflated condition of the epigastrium, wind tending downwards, confined bowels, and vomiting.

CAUSES.—Eating too much indigestible food, unripe fruit, drinking bad beer, cold in the feet or abdomen, anger, confined gases, worms, accumulation of faecal matter, too powerful purgatives, poisoning with lead, etc.

TREATMENT.—Equable temperature; hot compresses on the stomach; very strict vegetarian and spare diet; about five small cool enemata daily for absorption. Larger enemata in case of constipation. A cup of warm fennel tea will be found beneficial.

Friction of the abdomen with warm hands or flannels, and especially massage of the abdomen in case of confined intestinal gases.

If the colic is very severe, apply hot compresses or give warm baths (99° or as warm as they can be borne), or steam-baths followed by lukewarm baths (86°) with affusions on the abdomen.

In very obstinate cases, where there is a congenital liability to colic, the strengthening treatment should be resorted to. For Modes of Application, see Index.

TREATMENT WITH MASSAGE.—Stroking, rubbing, and pressing the abdomen, at first very gently, afterwards more vigorously, combined with enemata. (The applications to be made in a more energetic manner only when they can be borne.)

COMPLEXION, BEAUTIFYING THE. It must not be imagined that any cosmetics will ever ensure or retain a beautiful complexion; other means are necessary to attain that end, viz.:

In the first place, thorough attention to cutaneous action in the form of a daily full-lavation or wet rubbing of the whole body (not merely washing the face), or a bath, properly rinsing the skin, particularly that of the face. In the same way as linen can only be thoroughly cleaned by rinsing it repeatedly with pure water, so it is with the skin. If proper attention be paid to the whole of the skin by baths and full-frictions the duty of eliminating morbid matter from the system will not be laid exclusively upon the skin of the face. The face is usually the principal centre of

exhalation, because its pores are least clogged, owing to the constant contact with the air and its being frequently washed.

Secondly:—Healthy blood; the promotion of the circulation by plenty of exercise in the open air, well-ventilated sitting and bed rooms, open windows at night, proper non-stimulating nourishment, etc. We know that there is a class of people who give free vent to their passions, and indulge in vices of every kind, causing the blood to rush into their faces more quickly than with other people. These often suffer from various deep-red chronic eruptions or from deadly pallor. It is merely the unhealthy condition of their blood that causes pimples, pustules, herpes, etc.

As already observed, nature selects by preference the skin of the face to throw off morbid substances, because it has the advantage of being exposed to the beneficial influence of air and light more than the rest of the skin, and because the act of washing it draws the excretory matter which the blood contains more to the face, and more copious exudations take place there in consequence.

Thirdly:—Mental health; a serene mind, calm temperament, absence of grief, care, vexation; above all the government of the passions.

Everybody has made the experience that there are not only bodily, but mental causes, that give to the complexion either a ghastly pallor, an unnatural flush, or a yellow, sometimes ashy-grey, color. Young girls and marriageable daughters must not occupy themselves too much with amatory fancies and cares, since in this way inward peace, and with it the charming natural expression, disappears, and a morose, even uncomely appearance takes its place. (The face is the mirror of the soul!)

Wedlock, which with many and especially with inexperienced persons leads later on frequently to a deadlock, will usually come in time; it is not necessary, therefore, to worry about it.

Fourthly:—People, in particular those who suffer from a tendency of blood to the head, or girls with a very irritable skin, should, when washing and bathing every day, treat the head and face more gently than the rest of the skin. I should also, on account of the irritation produced thereby, deprecate the use of very cold water, or of soap, for the head and face as well as too energetic friction because the corrupt acrid matter contained in the blood is by this means attracted to the skin of these parts and discharged through the same.

To beautify a bad complexion, therefore, at any rate in cases where it is not a natural endowment, we may summarize the foregoing hints as follows:—(1) Thorough attention to cutaneous action by a tepid (73°) wet rubbing of the whole body every day; (2) Healthy blood promoted

by a simple, if possible a vegetarian, diet, the improvement of the complexion depending to a great extent upon limiting the admission to the system of injurious irritating substances; (3) Mental good health, and (4) Apply no strong irritants to head or face.*)

Eruptions on the skin or face may also be removed by friction of the feet or bathing the soles in the evening, by abundant exercise in the open air, frequently expanding the lungs, deep breathing, gymnastics at home, non-stimulating diet, regular action of the bowels, enforced if necessary by enemata, with the addition of a derivative enema daily. The production of good blood and its even distribution through the body will be attained by these expedients. (For Modes of Application, see Index.)

Lavater says: "If you want to be more handsome than you are, try to keep a pure mind, which rejoices in a healthy habitation, and not only will the roses again bloom on your cheeks, but irresistible charms will beam from every corner of the face, even if you are a mulatto."

Every lady who is affected with pimples in the face, a spot-stained skin in fact, should consider that advertised cosmetics cannot do any real good. Do these smaller or larger disfigurements fly on to the face from without? Certainly not; they are caused by vitiated humors within the system. When it has once been cleansed of these impurities, and the blood is again in a healthy condition, the skin will become beautiful without any external aid, and will remain so.

With regard to the use of soap, it is an unfortunate fact that it is absolutely necessary for cleanliness, both in health and disease. Only where thorough attention has been paid to the healthy condition of the skin, from childhood upwards, would it be possible to dispense with it. One of our best Natural Healers wrote the following remarks on this subject some time ago: Soap is a necessary evil where dirt cannot be removed without it. If a great deal of tempered water be used, soap may be dispensed with. Soap dries up the skin, and draws from the sebaceous glands their natural adipose matter. He who looks upon soap as a makeshift to be used only in extreme cases will long preserve a young, healthy, elastic skin, and a fresh complexion. When I call to mind several people, 80 to 90 years old, who are rather dirty in their habits, I ask myself which is the more injurious of the two, dirt or soap? As far as I am concerned I hate dirt and, therefore, use soap, when I cannot do without it.

With the exception, however, of the hands and neck, no part of my body has ever come in contact with soap. It is the same with my boys,

*) See also the article on "WATER." The cold lavations indicated there are meant to be moderately cold, in order to produce no irritating effect. For a person suffering from determination of blood to the head, or very sensitive skin or bad blood, etc., tepid lavations of head and face are preferable.

and their skin is like veined marble. Highly detrimental, however, is the application of soap to open sores, ulcers, suppurations, herpes, etc. It not only interferes with the cure, but very frequently drives back eruptions to the blood and vital organs. How many people with eruptions in the face have I not cured solely by the absolute prohibition of soap?! And who have better complexions—people who wash with soap or those who avoid it? I did, indeed, once in my life wash my face with soap (apart from shaving my chin, in obedience to a military regulation formerly in force, which caused me pimples and eruptions enough), and that was after a descent into a coal-mine, but never after. The application of soap to patients must be limited to a single cleaning of really grubby persons.

To remove scars left by eruptions the face must be rubbed with loofah, several times a day; the formation of a new skin, smoother and freer from scars, is accelerated by this process.—(Family Journal.)

DIANA OF POITIERS AND NINON OF LENCLOS.

It is well known that Diana and Ninon preserved their beauty, which has become historical, to a great age. At sixty Ninon possessed a girlish figure as delicate as it was fascinating, and her cheeks had the natural carmine of health. She was already approaching seventy years of age when a grandson of hers fell so passionately in love with her, that he committed suicide in despair of being unable to obtain her. A French historian has in recent times inquired by what rare secret cosmetics these modern Aspasias made their names immortal. These investigations are said to have been made at the instance of certain inquisitive ladies, and the result was published for the information of German women a few years ago in the Leipzig Gazette of Fashion. Those far-famed beauties did not make use of any mysterious essence, but washed their entrancing bodies every day with cold spring water (spring water is not so cold in the south as in the north).

The Caucasian race which we have the honor of belonging to (though people would not believe us, looking at us now), has red cheeks in the more northern latitudes. He who is not endowed with them is not healthy,*) though he and all the world may believe the contrary because he is not afflicted with an acute disease and displays no decided symptom of illness. These are very poor reasons. There are people who have pale complexions from their earliest youth, because in their case medical treatment has changed some acute disease into chronic indisposition, as we have already clearly proved. It frequently happens that persons in this condition, when

*) The converse is not necessarily true, viz.:—"He who has red cheeks is healthy."

a course of hydropathic treatment has again brought out and cured the old acute disease, find to their astonishment that their cheeks have again become tinged with a color which they had lost since their earliest youth.

Similarly it has occurred that bald-headed men have brought away from the Gräfenberg institution a sprouting crop which developed in six months into a fine head of hair. The idea of promoting the growth of hair by essences, oils, tinctures, etc., which are supposed to have a medicinal effect, is on a par with the idea, based on equal ignorance of nature, that health can be restored by the use of medicine, and is equally absurd. Not only the skin of the face, but that of the whole body, acquires by the application of cold water that delicate transparency which shows the blood underneath, and mainly constitutes the voluptuous charm of beautiful limbs. Even the most brittle and the hardest skin becomes supple*) after a course of hydropathic treatment, and displays delicate lights and shades of blue on the veins. This latter effect arises in consequence of regained health, filling the blood vessels with rich, abundant blood which before were dried up by chronic indisposition. If we compare a leg which is bathed with cold water every day with another which never touches it, we notice a difference of color analogous to that between the dark green of the woods and the pale, unhealthy green of the forcing-pit. The greatest painters of our time are apt to despair at the sight of the limbs in old pictures because, with all their efforts, they can never find limbs so richly endowed with the tinge of healthy blood, limbs with living flesh color, but only arms and legs, the color of which leaves it uncertain whether they do not come direct from the mortuary.

This, however, does not influence our belles in the slightest degree, because their taste in this respect has become so morbid and perverted, that a neck absolutely white, without the charming color of life, a chalk-white neck such as corpses have, is considered extremely beautiful. In order to preserve this cadaverous hue intact, it is the custom with many ladies, not to wash the breast, but to rub it down dry, perhaps with Eau de Cologne. Charming, delicate flesh! To the hue of death there are added small black pores, clogged with dirt. Everybody to his taste! The women of Lapland besmear themselves with train-oil and urine, to enhance their beauty, but the New Zealand woman laughs at both, because

*) It must be mentioned besides that the skin of the body and limbs acquires everywhere a lustre, as if anointed with oil. This is perceived most strikingly when, after an hydropathic treatment, the skin is brought into a line with the light. The velvet-like softness, too, and suppleness which the skin acquires after a radical water-cure is most remarkable. It may be asserted without exaggeration, that in these circumstances the skin of a man, even at an advanced age, and with a strong muscular development, grows much softer than that of a young girl with the flabby flesh resulting from the old treatment.

they don't know that a stick through the nose is the most potent female charm!—

Compote, see "DIET."

Compresses, Extra, see Index.

Compresses, Local Soothing, see Index.

Compresses, Local Stimulating, see Index.

Compresses, Stimulating, see Index.

Compresses for the Stomach, see Index.

Compresses for the Trunk, Chest, Head, Neck, etc., see articles under each heading and also "PACKS."

Compresses, Warm and Hot (also called steam compresses); **Hot-Water Bottles** (steam-jars) may frequently be applied instead of these compresses, see "HOT-WATER BOTTLES."

Conception, see Index.

Condyloma, see Index.

Confinement, How to Ensure a Normal, see Index.

CONGESTION. This term is applied to an increased flow of blood to a certain part of the body, and particularly to the head.

TREATMENT.—A derivative treatment should be applied to the parts of the body opposite to the congested parts, soothing or cooling compresses being at the same time applied to the latter. In case of a rush of blood to the head, for instance, the proper treatment would be to give stimulating neck or abdominal compresses, foot, leg, half or three-quarter packs, foot or half steam-baths, hip-baths, etc., together with soothing or cooling compresses on the head. Should engorgement of blood in the throat from indurated or swollen glands, tumors, scars, etc., be the cause of the trouble, massage, stroking, kneading, rubbing, etc., of the affected parts should be resorted to; in acute congestion of the head, the neck should be well massaged—derivative applications being, of course, employed at the same time. See also "CONGESTION" in "KNEIPP CURE."

Massage of the neck is not so suitable in chronic congestion of the head. (For Modes of Application, see Index.)

CHOKING. Should choking be caused by particles of food getting fixed in the windpipe, an arm should be raised and the obstruction will generally be ejected. More or less vigorous striking of the back may also be resorted to. See also "ŒSOPHAGUS, FOREIGN BODIES IN THE."

Congestion and Enlargement of the Spleen, see "SPLEEN."

Congestion of the Brain, see "BRAIN, HYPERÆMIA OF THE."

Congestion of the Lungs, see "LUNGS, HYPERÆMIA OF THE."

CONSTIPATION. It is to be regretted that the custom still remains of promoting activity of the bowels in children by at once giving rhubarb, decoctions of cortex frangulæ, etc., and in adults by resorting to castor-oil, senna, mineral waters or pills.

By the frequent employment of laxatives (as well as indulging in hot food and drinks, as coffee, tea, and such like) the flow of the humors is directed to the intestines and thus the digestive organs become relaxed and seriously impaired. (The cause of costiveness is in most cases a relaxation and consequent slow activity of the nerves, vessels and muscles of the digestive apparatus, produced by a defective process of assimilation.) There is nothing like bathing to assist the process of assimilation and to keep yourself and your children in good health. No laxatives are required in that case to keep the bowels open. By using these laxatives, especially in chronic affections and constipation, when they are frequently resorted to for weeks, months and even years, health is incalculably injured and the foundation often laid for life-long sickness. The Natural Method of Healing employs in constipation: massage of the abdomen and curative gymnastics, as well as water-enemata, in conjunction with a proper diet. These, if rationally applied, will remove constipation in all but exceptional cases. With regard to massage of the abdomen, it is particularly the first two manipulations (illustrated in the third figure of "Abdominal massage"), and in "Curative gymnastics" it is especially the first group which are applied against constipation.

The full enema referred to in the article "Enema" is always intended to open the bowels and the small or partial enema, always immediately following a motion, intended to be absorbed by the intestine. The process of assimilation in the intestine is by this means stimulated, and constipation gradually prevented.

The costiveness acquired by habit is to be distinguished from morbid constipation. The former occurs very often and may therefore be considered first. The main causes favoring this condition are:—paying too little attention to the state of the bowels and keeping no regular times for their action; prolonged sitting, driving or riding; dry, heavy and stimulating food; insufficient fluid; defective secretion of bile, in consequence of which the stool is light yellow or white in color; inactivity or weakness of the intestines, amounting sometimes to paralysis; excessive expansion of the rectum, etc. By the retention in the colon (usually the seat of the disease) of the effete matter, the latter is deprived of its liquid constituents. The excrement becomes hard, gathers into lumps, and is expelled with difficulty. If this state of things is allowed to continue long, the power of regulating this function at will is lost entirely; the complaint becomes chronic and difficult to cure. Costiveness of this

kind is attended with headache, loss of appetite, feeling of discomfort, nausea and various abdominal complaints. Although no great trouble arises in the beginning, people affected with this condition are subject to various disorders in after years. It is in the case of hypochondriacs and nervous women that this kind of constipation acts most injuriously. Women in general suffer far more frequently from this ailment than men. (See "WOMEN, DISEASES OF.")

The bowels ought to act every day.

TREATMENT.—To prevent or to remove constipation contracted through habit, the patient should accustom himself to regular motions at a fixed time, preferably in the morning (to ensure which an enema may be applied some time previously) and allowed from about ten to fifteen minutes to act. Although no particular desire for evacuation may be felt in the beginning, nature soon accustoms herself to regularity and the desired result will follow, if assisted by a stooping position and the exercise of a little pressure; patience therefore and perseverance are the only two things required. After stool, at whatever time it may take place, a small tepid (68°) enema should be applied (but not lower than 80° if the patient suffers from piles). This small enema is intended to be absorbed by the intestines; though the latter may sometimes at first eject it, it will readily absorb it after a few days. An abdominal compress should also be applied, in light cases only at night, in obstinate cases in the day-time also, and in the latter case the patient must remain in bed while wearing it. In light cases, a woolen bandage worn round the abdomen by day will be sufficient. Both for diarrhœa and constipation the absorbent enema must never be large (about a wine-glass full) otherwise the contrary effect will be produced.

When an enema is applied to a young child, he should be made to lie on his side, and the anus must be closed for some minutes by means of the thumb to prevent the child ejecting the enema.

The diet should as far as possible be non-stimulating, with plenty of whole-meal bread, fruit, soups made of whole-meal, butter-milk, fruit-juice, and rice with stewed prunes (the two latter should be soaked the evening before). Plenty of water should also be drunk, enemata frequently given and attention paid to cutaneous action daily by means of a tepid (72°) wet rubbing of the whole body or a lukewarm (88°) bath, etc.

In more serious cases a lukewarm (80°) hip-bath should be given, combined with kneading and pressing the abdomen. The abdominal massage and curative gymnastics (groups I. and V.) and other bodily exercises are specially effective. Take plenty of walking exercise, and perform some manual labor in the open air. Apply also an abdominal

compress at night. A steam-bath in bed may often be taken with good results.

Besides the constipation incurred through habit, there is also, as we have said, costiveness accompanying and characterizing various diseases. In such cases enemata must be applied in the first place, and the costiveness will disappear with the disease.

In more serious cases an automatic ball-syringe, with a vacuum arrangement to admit of the syringe being inserted as far up the intestines as possible, must be used, or, as an exception, a laxative may be employed.

The following is an effective remedy. The juice of a cupful of boiled prunes is strained through a sieve and mixed with two spoonfuls of wheat or rye-pollard. This mixture should be taken early in the morning on an empty stomach, and half an hour before every meal during the day. (It must be made fresh every day.) If necessary, soap, soda, or salt and water enemata may be tried. (For Modes of Application, see Index.) If in a case of obstinate acute constipation a laxative be absolutely required, give a harmless remedy, such as good sweet or castor-oil, or one or two cups of currants (about 100 to 150 grammes) mixed with senna leaves. It is a great mistake to suppose, as many people and even doctors do, that the application of an enema is only good for opening the bowels; it is a cure for diarrhœa as well. In cases of diarrhœa a small enema is taken immediately after every discharge, half a gill or less for an adult, and about a quarter of a gill for a child, according to age.

The temperature must be cool, but it is best to begin with 59° to 66°; after a few enemata the temperature may be reduced to 54° or even to 50°. The idea that the system may get accustomed to enemata is altogether erroneous. In the same way as the gouty patient throws away his crutch when he gets well, so enemata can be discarded without harm resulting when once the digestive organs are in good order again.

PHYSIOLOGICAL ACTION OF AN ENEMA.

In addition to cooling, dissolving and softening the contents of the intestines, the process according to *Jezek* is as follows:—If a water enema be introduced into the rectum, the water rapidly absorbs the gases in the intestines, and a vacuum is formed in the whole of the large intestine, to fill which the fæces are expelled by the small intestine. In consequence of the heat of the body and the variations of pressure the water is converted into vapor, the result being that the gases absorbed by it are again set free and are added to the gases, that have entered from the small intestine. As these gases have now an insufficient space

for expansion in the large intestine, an increased pressure is exerted, opening the orifice of the rectum and expelling the fæces.

CURE OF SEVERE CONSTIPATION OF LONG STANDING.

(From Dr. MUNDE's book" Natural Healing and Hydropathy.")

He relates the following case of Bishop *Diepenbrook:* "I led," writes the Bishop, "a very active life in my youth, spending much time in travelling, hunting, etc. A sudden change in my career, however, compelled me to lead a life of intense study for about three years after my twentieth year. Relying upon an iron constitution, I gave no heed to the consequences of my sedentary life, which manifested themselves by habitual constipation, often lasting from a week to ten days at a time. More serious results, however, gradually ensued, such as indigestion, want of appetite, gastric and abdominal complaints, vertigo, and a strong determination of blood to the head. I applied medicines, which certainly gave a relief but only aggravated the affection by weakening the organs. The result was a general accumulation of mucus in the internal organs. Repeated attacks of ache were a proof of nature's endeavor to heal, but the external favorable conditions were wanting. My sedentary life continued. I went through a course of waters at Wiesbaden, a few years later at Marienbad, and finally at Carlsbad, but without any result. The functions of the intestines were completely paralyzed and, owing to constant indisposition, my nerves were brought to the highest pitch of irritability. For a month I was compelled to relieve my stomach of thick gall by means of emetics and the frequent use of vinegar, suffering from the most horrible headache all the time. The condition to which I was brought by flatulence and pressure in the abdomen became intolerable; during the last twelve months I could only procure relief by regularly taking six pills of ox-gall three times a day. I was in this condition when I went to Gräfenberg to undergo the water cure. I am in good health now, but conform strictly to the prescribed diet, and take a bath every morning."

Dr. *Steinbacher*, a natural healer, in his book, "The Natural Method of Healing," mentions a case where one of his colleagues (Dr. *dal'Armi*) was troubled with constipation, which lasted for twenty-nine days, and which he at last and with great difficulty overcame by means of using oil and soap-suds as an injection, forced high up into the intestines with an india-rubber tube. He states that he introduced it to a distance of eighteen inches into the shaped curve of the colon, and that he has found the large automatic ball-syringe particularly serviceable for this purpose.

Consumption, see "PHTHISIS." (Lungs, Diseases of the.)

Consumption, Galloping, see "LUNGS, DISEASES OF THE."

Confinement, see "WOMEN, DISEASES OF."

CONTUSIONS arise from pressure caused by a fall, a push, or a blow. The skin may remain uninjured while the underlying tissues are pushed out of position, crushed, or torn. If only small blood-vessels be injured, the harm may be confined to a blood-clot, visible through the skin; if the contusion, however, extend to larger vessels, a swelling with discoloration may result. Inflammation and suppuration may likewise occur, and the injured tissues may be thrown off.

TREATMENT.—Should the skin be uninjured, the place should be repeatedly and vigorously pressed with the hand, previously dipped in water and oil. The pressure not only prevents further extravasation of blood, but distributes the already extravasated blood in the surrounding uninjured tissues, thus increasing the surface available for absorption and accelerating the latter process. The pressure may be followed by rubbing and vigorous stroking, using the flat of the hand for more serious, the thumb for trifling injuries. The rubbing should commence at the edge of the swelling, and be varied by strokes made outwards from the swelling over the sound flesh, in order to push the crushed and crumbled masses into the circulation.

A popular remedy is to press a hard, cold object, a stone, a piece of metal, the blade of a knife, or the handle of a spoon, firmly against the place; bruises are not so liable to occur if this be done.

In case of pain and inflammation, cold, cool, or soothing compresses or lavations may be applied for as long as necessary.

Bruises which suppurate must be treated with stimulating compresses well covered with flannel to promote the discharge. (For Modes of Application, see Index, also "BRUISES.") In case of serious contusions I refer the reader to the following case of cure:

A SERIOUS CONTUSION CURED.

By H. SPERLING, Natural Healer, Berlin. From the Journal of Natural Hygiene.

Mr. *Presdorf's* little boy, aged five, living in Naunhof near Leipzig, was playing in a court-yard one day, where grain was being winnowed in a machine. The boy had come close to the machine, his right hand was caught in it, and he sustained a severe injury to four fingers.

I was at once sent for, but I happened to be away from home, and somebody had in the meantime fetched Dr. *H.* I, however, arrived in time to prevent an amputation of the crushed fingers.

The doctor was a sensible man who placed no great reliance in the medical art, and sent patients to me when he was ill.

I told the doctor that amputation was not necessary as nature would herself remove any limbs that were incapable of being nourished. The parents, who had great faith in the Natural Method of Healing and in my treatment, requested the doctor to leave the case to me, which he did after a little parleying, saying, "I wish you success, and hope you will do your work well, as you always do." With that he shook my hand and left.

Having first placed the lower arm and hand in water of 73°, I had all the requisites for bandaging got ready. I took the opportunity of relieving the parents' anxiety, holding out the hope that all might yet be well, as although the bones had been crushed by the teeth of the wheels, the tissues, sinews, and nerves, though bruised, were not severed. I now put the arm on a little table, took one of the crushed fingers, pressed it into its normal shape in my hand, wrapped a wet piece of linen around it, and applied small splints made out of the wood of a cigar-box, fastening them with tape.

I treated the other fingers in the same way. To get a firmer hold I placed a wet piece of linen folded in four between and round the four fingers, a small, narrowly folded, wet towel round the hand and lower arm, and large splints round the whole, arm, hand, and fingers—fastening them with tape.

On taking my departure I gave orders that when the affected parts got hot the large splints and, then, the small towel were to be carefully taken off; the latter was to be dipped into water (68° to 73°), lightly wrung out, and again wrapped round the hand, and the large splints replaced.

In a few hours I returned, and showed the parents how to bathe the parts when they got hot, removing the large splints and towel, and putting the hand and lower arm into water (73° to 77°). After the injured places had been cooled they were again wrapped in the towel; the large splints were again put in place and fastened with tape, and the whole of the lower arm put in a sling tied round the neck. Then an abdominal compress was applied with the result that the little fellow slept the whole night, not even awaking when the compress was changed.

The above-mentioned treatment was continued till suppuration supervened, evidenced by the smell. Then the fingers were treated so as not to spoil the normal shape I had artificially produced. The small splints were retained for ten days, till the healing bones had acquired a certain amount of consistency—the large splint being worn till nearly the end of the treatment to prevent any danger arising from a push or a blow.

Three or four baths (82°) were given every day at first, this number being afterwards reduced, the sore places being kept as clean as possible, and every finger bandaged separately. Within five weeks the fingers were completely restored, with the exception of two and a half joints.

When I left Naunhof for Mittweida (I had been engaged as Natural Healer by the Natural Healing Society at the latter place) the fingers were still somewhat stiff, but the boy could do anything reasonable with them. I learned afterwards, in a letter from the boy's father, that the fingers had completely recovered their pliancy, so that the boy was able to write and use them for all ordinary purposes.

CONVALESCENCE. By this is meant restoration to health. To attain this end really and permanently, and to prevent relapse, the following hints may be of use:

1. The clothes and bed-linen used by the patient during his illness must be carefully washed. In the case of infectious diseases this cleansing process must be still further extended, not only the bed-linen, but the mattresses, pillows, blankets, and in some cases even the bedstead being thoroughly cleaned.

2. The sick-room should be thoroughly cleansed and ventilated by leaving the windows and doors open for some time, after infectious diseases for several days.

3. For the sake of still further aiding the excretory process, from three to five stimulating whole or three-quarter packs, or steam-baths in bed, or trunk and leg-packs, should be given in the course of one or two weeks, combined with an abdominal process at night, and a non-stimulating, easily digestible, but nourishing diet, in moderate quantity, to be continued for some time. See also "CURE OF HEALTH."

Convulsions, see "ECLAMPSIA."

Convulsions in Childbed, see "ECLAMPSIA."

Cooking of Food, see "MIXED DIET."

Cooking Range, see "STOVES."

Cooking Stove, Universal, see "STOVES, HEATING AND COOKING."

Cooking Stove, see "STOVES."

Cooling Compresses, see Index.

Cooling Treatment, see Index.

Copper Nose, see "BOTTLE-NOSE."

Copper, Poisoning by, see "POISONING."

Copulation, see Index.

CORNS are always situated on the feet and toes. They arise from the pressure of tight boots, by which a hardened and thick epidermis is formed, generally causing acute pain and leading to inflammation of the surrounding tissues.

TREATMENT.—Softening compresses on the affected parts at night, to be kept wet till the morning, when the horny tunicle (the corn) can be peeled off with the aid of a knife.

Another method is to soften the corn in a warm bath of ten to fifteen minutes' duration, and then peel it off. To avoid getting corns, no tight shoes or boots should be worn.

COMPLETE REMOVAL OF CORNS BY THE NATURAL METHOD OF HEALING.

(By ANTON DOERNER, from the "Journal of the Natural Method of Healing.")

Chiropodists and corn-doctors advertise by the dozen every day in the newspapers; men and old women puff the painless extraction of corns; others recommend corn-powders, ointments, plasters, etc.; but I shall show below that water procures relief better than anything else.

Corns are a constant source of trouble and pain, very rarely sparing adults, and there are few who cannot recall to mind the perplexity of a shoemaker, expected to make a boot that shall not press painfully on a corn, and few who have not a painful recollection of the agonies caused by some such excrescence.

The corn consists of successive layers of epidermis. The layers at first form a flat surface, but as the corn grows larger and firmer, these layers take up a more slanting position. In long-standing cases their position is nearly perpendicular, and their lower edges unite in a point. The pellicles are arranged like the leaves of a rose, converging to a centre which is formed by a reddish-brown spot, called the root. This is a place engorged with blood, and covered with a layer of natural skin; and the corn must be peeled as far as this, before we can speak of a complete cure. The larger and firmer a corn gets, the more pointed it becomes underneath, and the more acute is the pain.

The cause and origin of corns is in the first place constant pressure, and in the second place accumulation of perspiration from the feet. If the feet are washed daily, they will never be subject to corns, in spite of tight boots; but attention to the feet is still far too much neglected now-a-days, and many people even think that it is injurious to wash the feet in winter. It is astonishing that under these circumstances foot-diseases are not more prevalent.

I consider it unnecessary to enter into a fuller consideration of this complaint, but will at once describe my panacea, and the way in which it should be applied. The remedy itself consists of a thimbleful of cold water. The modus operandi and the effect are exactly the same as those of the pack.

I will here, for the benefit of tortured toes, relate my first experiment, made during a journey.

I had suffered for years from corns on my toes, cutting them occasionally either dry or after soaking them in water. I hit upon the plan of applying a pack to them in the following manner:—I took the end of a handkerchief, wetted about fifteen centimetres of it in cold water, squeezing it well out so that it was only damp. I wrapped this damp end several times firmly round the toe, squeezed a woolen stocking between the toe and handkerchief, and then wrapped the rest of the cloth round the toe over the woolen stocking; to get a very thick pack I also wrapped the other toes in it with the end of the handkerchief and stocking. By so doing the whole became thicker above and underneath. I then put four more stockings over the pack and the entire fore-part of the foot, and tied the whole firmly with another cloth, so that it could not get loose. I made this pack in the evening, before going to bed. Next morning I took off the bandage, and in the expectation that the corn had become softened, I began to pick it with my nails. I was not mistaken, for I easily pulled off one little pellicle after another, and when I could not take hold of any more, I cut small pieces with my penknife, seized them with my fingers, and peeled whole layers every time from the surface, and continued doing so till I had entirely removed the skin. This operation is perfectly painless, and the superfluous skin separates from the natural skin surrounding the corn so easily as to be scarcely felt.

Should the corn be so hard that it will not come off, a second pack must be applied the following night. I have repeatedly tried this experiment upon others, and have never failed.

This so-called pack can be effected more comfortably by wrapping a small wet rag four to eight times round the affected toes, and encasing the whole foot, including the heel if agreeable, in several woolen wraps, etc., so as to make it tight and safe (the toe, therefore, need not be wrapped in extra woolen material). THE AUTHOR.

Corrosive Sublimate, Poisoning by, see "POISONING."

Corset, see "WOMEN, DISEASES OF."

Corset, Danger of the, see Index.

COSMETICS. The cosmetics used by many ladies are most objectionable from a sanitary point of view, as they are injurious to the skin even when composed of harmless ingredients, for they block up the pores and impede the perspiration. Cosmetics, however, containing lead or bismuth may give rise to disease if used for a long time. See "COMPLEXION, BEAUTIFYING THE."

COUGH is a spasmodic expulsion of air from the lungs, accompanied by a short, harsh sound proceeding from the contracted glottis. Cough generally causes irritation in the air-passages, and may be of ominous importance or quite insignificant. This irritation may proceed from the larynx, the lungs, or the other respiratory organs, as also from more remote lying structures, such as the stomach, liver, spinal cord, etc., by means of nerve connection transmitted into the chest. In diseases of the respiratory passages it is the spasmodic contraction in the most delicate ramifications of the trachea, which gives the first impetus, by reason of the irritation of the nerve-flexus.

The nerve irritated by it is the vagus nerve.

As a branch of these nerves extends into the exterior auditory passage, persons are compelled to cough when they remove the wax from the ear with an ear-spoon.

A cough is not a disease, but only a symptom of it, occurring in a *great variety* of diseases. It is in reality a healing agent of nature, an endeavor to eject morbid matter and impurities from the system. The patient should not look upon a cough, therefore, as an enemy and a disease, but rather welcome it as a friend.

CAUSES.—In the first place a cough may arise from the entrance of irritating foreign substances into the respiratory passages, or from inhaling smoke, dust, gases, or other pungent matter. It may also result from catarrh, or products of the mucous membrane itself, such as mucus, pus, etc.

When the catarrh of the respiratory organs is not attended with fever, the cough is, at first, dry, short, and hacking, producing a tickling sensation; in the second stage it gets lighter, and the expectoration is of a thicker and milder description. When accompanied by fever, however, it is generally of a violent nature, with plenty of expectoration.

2. The causes of a nervous, convulsive cough are chiefly mental emotions and various other impressions upon the nerves. The cough is in these cases then not caused or intensified by quick running, climbing, or other bodily exertion, or by overheating. An irritated condition of the spinal cord is frequently the source, from which an exceedingly obstinate cough may arise.

The so-called morning cough of drunkards, coming on generally with daylight, is generally reckoned among the convulsive coughs. It usually attacks brandy drinkers the first thing on rising, and is attended by violent choking and fits of vomiting, producing nothing but phlegm.

3. A cough resulting from plethora principally affects young or robust, well-nourished, healthy-looking people. The pulse is full and strong, but the cough increases with overheating and exertion. It is generally associated with short breath, when neglected easily gives rise to inflammation of the lungs, and requires a treatment similar to that prescribed for this disease. There is, at the same time, always blood-spitting to be dreaded. Convulsive congestions of blood in the chest and protracted cough may arise in persons who are not plethoric. It is then produced especially by internal or suppressed piles, by the absence or suppression of the monthly periods in pregnancy, or of any other habitual hæmorrhage, as bleeding at the nose, etc.

4. The causes of a protracted cough may lie in the abdomen or the stomach. They are principally accumulations of mucus or other impurities in these organs, such as gall, worms, etc.; also gastric weakness, morbid conditions of the liver, etc. In such cases the cough may be recognized principally by the fact that the fits are not caused by deep respiration or long retention of breath, or by talking, screaming, fast walking, climbing, or any other form of violent exercise, and by the absence of panting, pressure on or pain in the chest. Fits of coughing are liable, on the other hand, to appear after meals, and especially after errors of diet.

5. Deposits of various morbid matters, chiefly originating from gout, rheumatism, scrofula, syphilis, etc., may be the causes of an obstinate cough.

6. A hard, intractable cough may be caused by abnormal length of the uvula, a defect which may easily and safely be remedied by the removal of a portion of it. It is advisable, therefore, in a case of obstinate cough, to have the cavity of the mouth examined by a doctor.

7. The cough caused by heart-disease is hacking, dry, tickling, and strident.

8. The cough (perhaps very slight) of pulmonary tuberculosis is constant, and attended in the beginning by the expectoration of a little viscid phlegm and of some caseous matter, frequently of a highly offensive odor.

In advanced stages of consumption the cough is subject to many variations. With some patients it remains dry until death, or only a trifling amount of phlegm is expectorated. With others the cough is very rapid, the fits recur at more frequent intervals, are exceedingly troublesome,

greatly distressing the patient, especially at night and in the morning, and producing much expectoration. With others again it assumes a convulsive character, often something like whooping-cough. When the disease is in an advanced stage, violent coughing comes on when the patient leans against anything hard.

TREATMENT.—The cause must first be removed and a course of treatment adopted bearing on the primary disease. For this purpose see especially "CATARRH OF THE TRACHEA," "LUNGS AND LARYNX, DISEASES OF THE," "TUBERCULOSIS," "ASTHMA," "WHOOPING-COUGH," etc., etc.

For adults full steam-bath in bed followed by a lukewarm (86°) bath or full steam-bath, followed by a full pack and bath. Next, stimulating (82°) abdominal pack at night. Douche baths also have an excellent effect here.

An ordinary cough is speedily mastered by trunk-packs, producing perspiration or moist heat, occasionally combined with throat and shoulder-packs, followed by full lavations, also by repeated gargling with tepid (72°) water and drawing lukewarm (80°) water into the nose, together with moderate exercise in fresh (but not too cold) air, and non-stimulating diet. In obstinate cases apply three-quarter or full packs and affusions (upper, back and knee-affusion alternately). See "KNEIPP CURE."

It is desirable that the patient should drink a mouthful of water after every fit of coughing and take only non-stimulating food; he should breathe, as we have said, pure and rather mild air, both in and out of doors, avoiding dusty and smoky air (people with wan, hollow cheeks and coughs are seen every day sitting and talking for hours in coffee-rooms filled with tobacco smoke). Cough-lozenges, soothing syrups, herbs, petroleum, cod-liver-oil, and every other wretched useless stuff of the kind must be eschewed. Vexation, anger, jealousy, etc., must be avoided as well as strong coffee, tea, wine, beer, tobacco, spices, and all stimulating food and drink which are injurious to persons afflicted with a cough.

Congestions of blood in the chest should be counteracted by repeatedly applying soothing trunk-packs, with stimulating foot-packs (especially at night), also by a derivative treatment. (For Modes of Application, see Index.)

COUGH IN CHILDREN arises frequently from breathing noxious air, or from a chill to the skin or the mucous membrane. This often happens with a sudden change of temperature, as from going from a warm room into the cold air, but it can not happen when the child has been hardened.

Before any such sudden change from warm to cold air, both children and adults should take a drink of fresh water, to prepare the mucous

membrane of the respiratory organs for the cold air, and to harden them. Tenderly nurtured children are also liable to cough, after lying naked for some time. This happens, as a rule, in consequence of their being covered too warmly and too heavily, because children will instinctively throw off bed-clothes in their sleep, if they are too warm; a thing they never do when only moderately covered.

Babies, again, often catch cold and contract a cough by being held out for some time in cold or cool air to make water. Or they may contract a cough in consequence of some inflammatory disease. Parents must never take it lightly when they hear their children cough. The younger the child, the more perilous is the cough. All children, but most particularly children liable to coughs, must be protected from the keen west and north winds. The entrance into the trachea of dust, smoke, and other acrid substances must be most anxiously guarded against by children and adults troubled with coughs.

TREATMENT.—In addition to avoiding the above causes it will, in the majority of cases, suffice to make the child live day and night in pure, moderately warm air, giving a few diaphoretic trunk-packs, as indicated before, or a full steam-bath in bed. Should the child feel uncomfortable in the full-pack, on account of its arms being confined in it, a three-quarter and shoulder-pack, well covered with woolen material, should be given, followed by a bath. Hardening, however, is the principal thing.

In recent cases, originating from colds, a wet rubbing of the whole body (82° to 73°) should be given, the patient being afterwards wrapped in a woolen blanket for half an hour to promote warmth, or a steam-bath, followed by a full-pack; or a three-quarter pack with shoulder pack, followed by a bath.

TREATMENT WITH MASSAGE FOR COUGHING CHILDREN AND ADULTS. —Chest and back should be moderately tapped and stroked with both hands in an upward direction, and from the spinal column outwards for about ten minutes, especially in whooping and convulsive coughs (one hand slaps the back gently, and the other the chest with the flat part at the same time). The execution should be slow, respiration quiet and not forced.

CURATIVE GYMNASTICS.—Deep breathing for ten minutes in the morning and evening in the open air or at an open window. Group III once or twice daily. See "COUGH" in "KNEIPP CURE." For Massage and Curative Gymnastics, see Index. For Modes of Application, see Index.

Cow Pox, see "SMALL POX."

CRAMP IN THE LEG. This frequently arises for a short time from forcibly stretching the leg. (It is particularly violent in cholera, see "CHOLERA.")

TREATMENT.—Gentle stroking of the calf generally suffices to stop the cramp, or vigorous friction and stroking massage with dry hands, continued for a longer or shorter time.

If it be at all obstinate, foot steam-bath (from 30 to 50 minutes), followed by massage (rubbing with wet hands dipped in tepid water), with stimulating calf-packs to follow and massage afterwards again. See also "CRAMP." (For Modes of Application, see Index.)

Crayfish, How to Cook, see Index.

Cream Sauce, see "DIET."

CRETINS are individuals who, on account of some congenital malformation of the brain, remain at the lowest stage of mental development. They seldom reach the age of manhood.

CROUP is a very severe and much-dreaded disease. It consists of a violent inflammation of the larynx, and attacks children most frequently between the ages of two and six, more rarely from seven to ten years old. Well-fed, stout children of strong physique, or over-fed ones on the one hand, and those more delicate and susceptible to catching cold on the other, are most generally subject to it.

SYMPTOMS.—The first stage usually begins with hoarseness. Clearing the throat to remove phlegm causes pain in the affected part. The clearing of the throat is followed by a cough, characterized by a dry, sharp, hollow, barking sound. At first, children affected with it sleep quietly, waking three or four times in the night to cough and going to sleep again. A crowing, crackling noise, as the breath is drawn in and expelled, shows a dryness of the throat. The patient often awakes suddenly, grasps with the hands at the mouth and the neck, as if to remove some painful obstruction, giving plainly every indication of the restlessness caused by pain and impeded breathing. Many children exhibit symptoms of catarrh, the eyes filled with water, sneezing, furred tongue, the nose stopped up, the upper lip swollen. Older children complain of noises in the ears, giddiness in the head, paste-like taste in the mouth.

When the second stage is reached on the evening of the second day, the condition has become more serious; symptoms of fever appear; the skin now feels drier and hotter than it is normally. Breathing and pulse are accelerated. The feeling of heat and thirst has increased, the urine is of a dark and dull-red color, and deposits a sediment similar to brick-dust. The cough increases in frequency and becomes more painful. The

breathing and pulse grow still more rapid. The patient is in a cold sweat; the breath in passing through the obstructed and painful air passages makes a wheezing, rattling sound. There is an inclination to vomit, and actual vomiting fits, by which all the contents of the stomach, food and drink, are ejected, occur, and the children at times cough up tube-shaped masses of phlegm, streaked with blood (croup membranes).

In the third stage hoarseness becomes permanent. Speaking and crying cease. The cough is less frequent. In many cases the little sufferers are so much weakened, as to be no longer equal to the exertion of coughing. The difficulty of breathing reaches its climax; the patient sinks back with widely opened mouth, blueness of the countenance, protruding tongue. The most terrible of deaths is over, and want of air has released the child from its sufferings.

Causes.—As in all inflammatory attacks, faulty nutrition and want of attention to the skin are the true sources of this disease. The power of resistance to disease given by nature has been taken from the child by pampering and coddling, and all kinds of disorders find an easy entrance into its constitution.

Treatment.—As soon as the suspicious cough makes its appearance, the patient should be put at once in a (80°) lukewarm pack (full or three-quarter), the sheet of which should only be lightly wrung out; and a bottle of boiling water, wrapped in a wet cloth, should be placed at the feet; duration of the pack, an hour and a half; then a bath (90°) with (72°) lukewarm affusion on the neck. This treatment should be repeated, according to circumstances, in five or six hours, or sooner if the symptoms become more marked. In addition (80°) continuous abdominal compresses and (72°) stimulating calf packs renewed every two hours, and (72°) soothing compresses on the throat, renewed every half hour, may be applied. Plenty of fresh air (the window open and occasionally also the door); drinking cold water; cool, non-stimulating diet. and enemata for constipation and as a derivative measure.

Treatment by Massage.—Under competent advice, massage of the throat and tapping of the back with the fingers wetted and spread out may be applied; if possible, with the patient in a sitting posture, and so that the little finger is brought first into play. The massage and tapping may be continued, until the momentary danger of choking has been averted. This mode of treatment is suited both to light and severe cases; it will at once modify the symptoms of the latter. See also "Massage" under "Diphtheria."

Another Treatment.—When croup first shows itself, a steam-bath in bed should be given at once to induce perspiration (duration about an

hour to an hour and a half); after that a (72°) tepid full washing or a (86°) lukewarm bath with vigorous friction, especially of back and chest. If a pack is given, and the patient feels uneasy in it, he should at once be taken out of it; a rule also to be observed in the treatment. In the last stage, continuous (72°) tepid abdominal packs or Scotch compresses of from thirty to forty-five minutes' duration, combined with foot steam-bath in bed from an hour to an hour and a half. The abdominal pack is generally changed once during the steam-bath. (For Modes of Application, see Index.) Another mode of special treatment for croup has been adopted by approved Natural Healers when the danger of choking seemed imminent. It consists in rubbing the patient over with a wet sheet, carried out by all hands available, and continued until the danger is past. The patient is then left wrapped in the wet sheet, and hot-water bottles are applied to the feet and legs. As soon as the feet and legs are thoroughly warm, the rubbing process may be repeated, if there still seems a danger of choking, or whenever it threatens. A bath should be given as the conclusion of this treatment.

KNEIPP CURE.—First the "Hay-Seed Shirt," and perspiration; later washings and affusion; the upper affusion being specially recommended, as a means of loosening the phlegm.

CURE OF CROUP.

By H. CANITZ, of Berlin, Natural Healer.

It was on a Friday, in the month of December, that I was called away to the sick child of the telegraph clerk, Mr. *Hirsch,* with whose family I was acquainted, as they were members of the Society for Promoting the Natural Method of Healing. I entered the sick-room in the evening between five and six o'clock, and found the three-year-old, well-developed, well-nourished, little daughter in the third stage of croup; fever, fits of choking, contraction of the thorax, breathing at the cost of all the strength left, voice completely toneless, dry cough, loss of appetite, and entire helplessness and hopelessness on the part of the anxious parents, who had already lost a boy whose last illness had been marked by similar symptoms. The physician, who had been called in early in the morning, had prescribed antimonial wine; but "once bitten, twice shy," says the proverb, so the parents who had seen, when they lost their last child, that tartar emetic had only augmented its death-agonies, had no confidence in this remedy, but sent at midday for another physician who, they thought, was not a man of many medicines, because it was generally believed that he was a partisan of the Natural Method of Healing. He arrived at three

o'clock in the afternoon, and declared, like the first physician, the condition to be extremely critical and hopeless; and prescribed phosphorated spirit. He also advised that the outside of the throat should be painted with phosphorus. He did not disapprove of the abdominal-compresses which the parents had already applied. Perplexed with the prescription, but more so with the sad prognosis, they requested me to come; and I found the patient as stated above.

There was not the slightest doubt that there was grave danger in every delay, and the point was to quickly and decisively assist what vital force still remained in the body. Stimulating packs supplemented by stone-ware bottles filled with hot water, and preceded by vigorous, cool, wet rubbing of the body, were the first measures taken. On Saturday the condition was still highly critical, although the fever had somewhat abated. Therefore (88°) half-baths, with (72°) affusions and cool enemata, were applied, while the packs were continued. At noon of the same day the child's condition was a trifle more satisfactory, and a further half-bath was ordered for the evening, and cool enemata, succeeded by packs, proposed for adoption meanwhile. The second physician who had come about six o'clock in the previous evening had expressed his fear that death would inevitably happen during the next few hours, and I found the parents still in despair on the evening of this day, but the child quiet and breathing more freely, and the fever hardly perceptible. It was utterly incomprehensible to me how any one could say that death must of necessity take place; on the contrary, I expressed my utmost conviction in hopeful terms, that, provided all my orders were implicitly and conscientiously obeyed, a very good night and an auspicious Sunday might be looked for. Sunday came and proved that the parents had faithfully done their duty, for every danger had vanished, the cough was loose and soft, the breathing easy and without effort, the patient's tone raised, the fever gone entirely, and appetite had returned. This was appeased with cocoa, from which the oil had been extracted, and stewed, dry fruit, as well as the juice of it, were abundantly partaken of. On Monday the child's condition was excellent, the voice all but clear, and the features of the case such as to exclude all idea of danger. The convalescent has to this day remained well and happy, and in a normal state of health. The "purely natural treatment" thus rescued from death a child who had been given up by the physicians, and changed the terrible grief of the parents at the prospective loss of a beloved child into unspeakable joy—another proof that the natural treatment is, even in the last stage of croup, still able to bring relief; but how much more easily would that be done, if instead of waiting till that stage arrived those concerned would set to work from the very outset to support

nature in her healing efforts and processes, and thus avert all danger. May the case above portrayed contribute to the result of getting the right thing done at the right time, and thus be the means of sparing many a care and anxiety, many reproaches and tears.

CURE OF CROUP.

Extract from Dr. KOERNER'S book.

I was sent for in the greatest haste by Herr *v. B.*, of B., whose youngest son, aged four years, had, according to the coachman who had driven fourteen miles to fetch me, four days previously sickened of croup, and been given up by two physicians, who had said, when his master sent him for me, that the boy could not be saved. Entering the sick-room, which smelt strongly of musk, I met a colleague, who shook his head sadly, as much as to say that no laurels were to be gained there.

The patient lay half slumbering, with his head bent back, his face wan, the respirations superficial and made with the abdominal muscles, the breath causing a piping, rasping sound, in consequence of the accumulation of phlegm. The pulse was small and thread-like, very quick, the extremities cool, the body hot and dry.

On a table, by the side of the bed, stood a whole battery of medicine-bottles, boxes, and jars, with powders and salves in peaceful fellowship side by side, but all the remedies which they had contained—musk, calomel and copper—had not availed to wrest one inch of ground from life's threatening enemy; on the contrary, they had done more harm than good; since by the use of copper, a strong poison, the vital force must have been broken, as the result showed; for vomiting had ceased entirely, the remedy, therefore, remained in the stomach, and had to mingle with the blood. To re-awaken the prostrate self-preserving power, musk had been resorted to—as is very beautifully and clearly explained and set down in the drug books, although it proves itself useless at the sickbed. The boy being in the third stage of croup was near the end; and I at once saw that there was but little hope of combating a disease so far advanced; still I undertook the case, trusting to my simple remedy. I first had the patient rubbed vigorously with cloths, wrung out in cool water to rouse the skin to action and draw the blood from the centre to the surface; I then had him wrapped in a thick soothing full-pack, with a hot-water bottle, wrapped around with wet cloth, at his feet. In this way I had him packed in wet sheets every three hours up to the fourth day, which by stimulating the system, had the effect of making him cough a great deal and get rid of much phlegm. On the fifth day he had less difficulty in breathing and expiration became easier.

After the fifth day, I left him in the pack for four hours, the breathing became more free; the sound of the cough became less hoarse and more sonorous; improvement proceeded slowly but surely, and the packs in which I caused the patient to remain somewhat longer had to be continued till the fifteenth day, when I had the good fortune and the pleasure of seeing the boy recover from the severe disease, and of having my trouble in sitting by his bedside every night rewarded by such a fortunate success.—

I was summoned by a telegram to go to Capt. *von L.*, of Anklam, to see his daughter, twelve months old, who had sickened with croup three days before and been given up. I found the following sad state of things: The child had great difficulty in breathing, had a hoarse, dry, whistling cough; was very restless, threw herself about; the greatest anguish was expressed in her features, she shook out her arms, she seized her throat, pulled at her tongue, and was tormented with choking fits when cough came on. The face was red, the pulse quick, hard and full; the skin hot, the tongue covered with fur, the thirst violent. Though the prognosis in this, the second stage of croup, was very serious, I had nevertheless confidence that the child could be cured, as her condition was not so critical as that of the boy had been. I proceeded, therefore, at once with the treatment, causing the child to be wrapped from the chin to the feet in a table-cloth folded suitable to her size, and wrung out in spring-water. After three hours a fresh pack was given, to induce a flow of the blood from the center to the surface and these packs were continued, being changed every three hours. On the second day the difficulty of breathing had diminished, the sound of the cough had become clearer, and the child recovered so visibly from her malady that on the fifth day I discontinued the hourly treatment and gave a pack only in the morning, evening and towards midnight; thus this child also was saved which under medical treatment would have fallen a certain prey to death.

I restored from croup the little daughter, aged nine months, of Herr *M.*, of R., near Anklam, after she had been given up on the sixth day by a homeopathic doctor, who in that part of the country was considered infallible.

CROUP CURED.

(A letter to the Author.)

By following your simple system, I, last year, completely cured my son, aged five years, after the doctor had said that I should lose the child unless I consented to have the operation of tracheotomy performed on him.

Since then I have not employed a doctor; but have treated all ailments occurring in my family according to the directions contained in your work—"Bilz; the New Method of Healing"—and with the best results. I have thus cured croup, inflammation of the lungs, scrofula, diphtheria, and other diseases.

Frau *R.*, Brühl, near Cologne.

Crust, see "FAVUS."

Crusta Lactea, see "MILK SCALD."

Crymodes, see "MALARIA."

CUPPING GLASSES. The use of cupping glasses for purposes of blood-letting must be unhesitatingly condemned. See "BLOOD-LETTING."

Curds, see Index.

Cure of Diseases by the Natural Method of Healing, see Index.

CURES EFFECTED BY SYMPATHETIC REMEDIES depend frequently on deceptions and humbug; if *e. g.* one of these remedies happened to effect a cure, this cure really took place in a natural way. Thus stroking or laying the hand on an affected part is one of the sympathetic remedies most frequently applied. With vigorous stroking (kneading, massage) the accumulation of blood and lymph and firmly adhering deposits of excretory matter, morbid substances, etc., are removed. In the same way by stroking and laying on of hands a radiation of magnetism is produced. The ozone (which see) which escapes from the stroking hand entering deeply into the painful or affected place very often speedily soothes the nerve causing the pain, and stimulating the respective part of the skin at the same time to greater action and secretion. The faith, too, which the patient has in the remedy is a potent factor in the cure because the tendency to recovery of health, innate in all, is powerfully aided by confidence in a remedy. By all this a surprising alleviation of pain and improvement of the existing morbid condition is frequently gained.

Regarding the effect produced by honest magnetopathists aiming at cure by means of bio-magnetism—that has nothing whatever in common with deception and humbug.

Cures reported in this book, see List in Index.

CURES, REPORTS OF. Many, indeed, most of the principal illnesses are followed in this book by a report or reports of cure, in order to awaken confidence in our method with the people, and to break them of their prejudice against it. The successes daily attending the Natural

Method of Healing are so numerous and astonishing that one could fill whole volumes with the descriptions of cases where patients have been given up by the medical faculty and afterwards saved by our method.

Do not imagine, dear reader, that those diseases, to which I have appended no reports of cure, cannot be cured by our method, for all diseases are treated better and cured more surely by the natural method than by medicine. Of course, where the important internal organs are much decayed, and the patient, so to speak, is at death's door, our method cannot cure or heal; however, even in these cases it can act soothingly and alleviate pain.

Here I must mention that there are sick persons who have undergone treatment according to our method both at home and in a sanatorium with but small success. There are also patients who have derived great benefit from the same treatment, but, unfortunately, not permanently, so that their ailments, after they had returned to their former surroundings gradually reappeared. Both these results are for the most part due to the fact that their complaints were of five to ten and even more years' standing, and organic change had already set in, so that, of course, a treatment of from five to ten weeks could not suffice to cure the disease even if it were curable.

The following example will make this clearer. If a plant, tree, shrub, etc., threatens to die through noxious influences, such as bad soil, too little air, light, or moisture, and further through vermin, etc., the sensible gardener or farmer takes it out and places it in better surroundings. Then the plant begins to get stronger and to thrive (presuming these favorable influences do not come too late). If, however, after one or two months the plants are taken away from their favorable surroundings and brought back to their former ones, it is patent to everyone that they will again pine away. From this it follows that patients suffering from chronic diseases (diseases of long duration) should continue the manner of living and some of the applications of the natural method, even after a cure has been effected.

Here, too, I earnestly appeal to all to attend to their sufferings in time, so that the disease may not become too old and absolutely incurable. Further, I call attention to this maxim,—learn to guard against disease—for it is easier to ward off a hundred maladies than to cure a single one if serious and of long standing.

ILLNESS, CURE OF SEVERE.

27, Elsasser Strasse, Berlin.

Dear Mr. Bilz:

Your book, "The New Natural Method of Healing," is a treasure for suffering humanity. My aged mother and I have to thank the same for our complete recovery from severe diseases, etc., etc. Down with allopathy! Hail to the Natural Method!

H. Gebert, manufacturer.

ILLNESS OF LONG STANDING CURED.

Aussig, on the Elbe.

My dear Mr. Bilz:

Allow me to express my sincerest thanks for the cure of my illness for which I am indebted to your book. I have been sickly from my birth, and have suffered much. It was doubly painful to me that I looked well in every illness. I then procured your book, and found it to be of priceless value. Once more, dear Sir, a thousand thanks for all benefits, and may humanity take your admonitions to heart.

Franz Pohl.

THE VALUE OF THE NATURAL METHOD OF HEALING.

(From the "Periodical for Hygiene and Natural Therapeutics.")

I should be indeed glad if the following account contributed to the spread of the Natural Method of Healing. I never was a great advocate of medicine, whether applied internally or externally; but if a man knows and hears nothing of any other method of cure, it is not to be wondered at if he acts like others, and in case of danger applies to the nearest doctor. Of the real natural method, as I know it now, I knew just as little as millions of others do. Up to a short time ago nothing was known in Berlin except cold water and sweating cures. We live, probably like all inhabitants of large cities, very effeminate lives here; and it is a blessing that Sanitätsrath Prof. *Niemeyer*, and in particular Mr. *Canitz* have of late held forth a new light to us Berliners, which will shine like a brilliant beacon on the field of hygiene and therapeutics, and show many a man, hesitating and groping in the dark, and many a thinking and inquiring mind the safe way not only home, but forward.

I have lately heard several times of the natural method from a friend of mine, who, like myself, is now a member of the Society of Hygiene, and whose family doctor is Mr. *Sperling*, a natural healer—Neander Strasse of -but I was rather sceptical.

Notwithstanding the fact that Mr. *Sperling* had treated several cases in his family with most extraordinary success, and that I had heard of them, I could not make up my mind to adopt this method. It did not seem feasible to me that water only, as I thought, or steam-baths, etc., should possess the virtue of curing. But fate at last taught me a serious lesson in the form of a malignant disease which befell one of my children, and made me prize highly this natural treatment. My eldest son was vaccinated in 1874, at the age of thirteen. An eruption appeared in February, 1881, on his abdomen, between the navel and the os pubis; which the doctor pronounced to be syphilis. He prescribed an ointment for it, upon which the eruption disappeared. We thought the boy was well, but it turned out differently. At Whitsuntide, 1881, another malignant eruption appeared, this time on his neck, and his eyes were inflamed; the doctor again said it was syphilis. His eyes were painted with nitrate of silver every hour of the day, the wounds annointed and medicines given; yet his condition did not improve; on the contrary, it grew worse.

The doctor, having his doubts about the case, and saying something of the boy perhaps becoming blind, we called in a second physician, who treated the case as the first had done; finally saying that an oculist should be consulted. This was done, but he would not meddle with the eruption on the neck.*) A thick crust formed beneath it, my son said it burned like fire, and a highly offensive smell was emitted. His eyes got more and more inflamed, and discharged a great deal of matter, whilst the swelling constantly increased. The same treatment was continued. Everything seeming to turn out as badly as possible, and the physician expressing the opinion that, in spite of every effort, my son might possibly go blind, I became very anxious. One son being already a cripple in consequence of medical treatment of inflammation of the hip joint, the thought that my other boy might become blind was terrible. At my friend's instigation Mr. *Sperling* was called in. When he had thoroughly examined the boy, he began his natural treatment on him; and on the fifth day his eyes could be considered safe. After the first week the patient suffered with an eruption at the coccyx, and deep wounds appeared in his calves, but they ultimately healed completely. The whole body was gradually covered with an offensively smelling eruption, and the greater the eruption the greater the improvement in his eyes; there was nothing more the matter with them. In the fourth week the eruption began by degrees to disappear, the discharge from the ears and the eruption on the neck ceased entirely. At the end of the fifth week all the sores of his body were healed. How

*) This is very plain. As an oculist he has nothing to do with a cutaneous eruption. That is the business of another specialist. (The editor.)

great was our anxiety! What a struggle! but, God be thanked, the natural treatment had conquered. My acquaintances who had seen the patient during the worst period, were astonished at the cure without medicine, and with one voice praised the Natural Method of Healing.

But I would here express my deepest gratitude to Mr. *Sperling,* and recommend him most warmly to all sufferers.

The writer's name and address can be obtained from Mr. *Sperling,* or from the Editor of the above periodical.

PRINCE BISMARCK AND THERAPEUTICS.

(From the periodical for Hygiene and Natural Therapeutics.)

Prince Bismarck, our glorious Imperial Chancellor, for a long time suffered from a serious disease. Every loyal and genuine German, who has a true conception of the man's greatness and merits, must throughout have felt in his inmost heart the deepest sympathy with him. "Is it not possible to cure his disease and obtain for the prince the priceless boon of health?" This question must have often been asked, and as often been answered with "No." There surely was no lack of physicians. Every one would have thought that the prince's position ensured his exemption from pain. A university town, an imperial capital, a metropolis like Berlin, must surely contain numerous medical celebrities possessing not only renown in Germany, but universal fame. And certainly there is no lack of men of world-wide reputation, rich in potent knowledge and of great capability. The most eminent and learned professors were at the disposal of the "Iron Chancellor" in his illness. What a number of highly scientific consultations and councils must have taken place between the sapient gentlemen, to find in the arsenal of the "Materia Medica" the remedies which were to restore the chancellor's health! But—the physicians changed, they came and they went, but the illness remained, and the greater the number of doctors and of medicines, the worse the condition grew.

The stately ship of medical therapeutics was wrecked on the Imperial Chancellor, and the halo of licensed medical practitioners dissolved. As a matter of fact, they had to admit their utter incapacity to aid him and to realize the hollownes of their science.

Homœopathy, too, the badly treated bastard of Allopathy, had an opportunity of trying its hand on Prince *Bismarck.* The Chancellor, having commenced to doubt the efficacy of medical science privileged and sanctioned by the State, confided himself to the best representatives of this art, who attacked the greatly weakened but still "iron" constitution with

infinitesimal globules. Of course the result could be but negative; the patient remained ill in spite of "Hahnemann's dilutions," which turned out to be delusions in this case. Nothing else could be expected. A nature, proof against case-shot, bombs, and shells, could not show the white feather when attacked with globules. Homœopathy was bowed out and Allopathy once more made its entry.*) He could not do without medicine, and, however much the Chancellor might doubt the infallibility of medical treatment, there was nothing for it but to take the doctor's stuff again. And yet—another way had been found long ago, and had been entered upon by thousands of ordinary mortals with the best results. Thousands upon thousands of sufferers, many of them with one foot in the grave; wasting, wretched people, treated, maltreated, and finally abandoned as hopeless, by allopathists, had here found what they had looked for in vain—their health, their contentment, their activity and happiness.

This way certainly is, or we may now say, had hitherto been mentioned with words of warning, and strewn with thorns. He who entered it, and led the patient along it, was exposed to mockery, scoffing, contempt, and persecution. The name of this way is, "The Natural Method of Healing," and it rejects, absolutely, any and every kind of pill, powder, mixture, potion, and extract; and along its course no dispensary is to be found. This way, discovered long ago, and at the disposal of the Imperial Chancellor, was at last fortunately taken by him, and that with excellent results. Prince *Bismarck* recovered his health without medicine. What advocate of the natural treatment would not rejoice at such a result, rejoice that the principle of cure without any medicines whatever was destined to restore the "greatest German" to health after every possible medicine had been tried and had only aggravated the disease? The "Frankfort Journal" had a long article on this subject, from which we take the following:

"By the successful cure which Dr. *Schweninger*, in Munich, effected without medicine in the Imperial Chancellor's son, Count *Wilhelm Bismarck*, the attention of the Prince was directed to him. Count *Bismarck* had for a long time suffered, not, as was publicly believed, from

*) Note by the Natural Healer, Mr. PLATEN: "We do not approve of the attempts to saddle this failure upon Homœo pathy, an acknowledged efficacious medium of cure. Our own treatment, whether caused by wrong applications or for want of the necessary reaction the patient must be possessed of, also has failures to record, and thus the homœopathic physicians may in that case have erred in the choice of their medicines, or Prince B. perhaps did not fully observe the very strict diet required with homœpathic treatment. At any rate, we consider it decidedly wrong to condemn Homœopathy because no positive success was recorded in this case by HAHNEMANN's treatment.

obesity, but from obstinate gout and very considerable exudations at the joints. For seven years the young count, the "Frankfort Journal" states, tried one medical celebrity after another, without finding relief, till at last Dr. *Schweninger* took up the case, and in seven months cured him of the gout and reduced his weight by seventy pounds, in the most natural and sensible way, without the use of any medicine, but simply by strictly regulating his mode of life and his nutrition in a scientific manner; by a rational treatment, calculated, above all, to preserve and utilize his strength and functions, and which the patient adhered to with resignation and constancy.

Schweninger was called to Varzin in October, 1882. The prince was then in very bad health. He was not only in a highly critical condition, with regard to the derangement of his entire nervous system, but in the yet more lamentable one of being unable to take sufficient nourishment.

It was only by most carefully regulating the entire mode of life of the prince, his meals and drink, sleep, work, exercise, that the doctor at length succeeded in gradually raising his strength, arresting the loss of flesh (caused by having taken so much medicine), in improving his digestive powers and getting all his digestive organs to act normally. To this treatment alone he owed the cure of obstinate jaundice, and the improvement of his greatly exhausted nervous system. The pains in his face appear now and then, but only slightly, and soon pass away. Prince *Bismarck's* sleep is quieter, sounder, and more refreshing than it has been for a long time, his appetite and digestion are good. He is able to walk, and has abundant horse exercise, which he has not had for years, and he enjoys first-rate spirits. And in the acquirement of these boons not a drop of medicine has been employed."

We rejoice in this fact, in this acknowledgment, not because it is anything new, for the Natural Method of Healing has scored great numbers of such successes. We, the adherents and representatives of a treatment that dispenses with medicine, rejoice altogether because such an important personage as Prince *Bismarck* has so palpably benefited by it, and thus proved its right to what it claims to be, a veritable art of healing. It is to be hoped that nobody will venture henceforth to jeer at the Natural Method of Healing, which was the means of restoring Prince *Bismarck* to health, and call it quackery; and that they, who with this treatment try to sow the seeds of health and well-being in home and family, in commune and State, to spread the doctrines and maxims of a sensible, rational and strictly natural mode of life, and prevent every kind of ailment, may no longer be looked upon as worse than highwaymen, although, in fulfilling their mission, they may destroy "faith in medicine" and rob the medical images of their glory.

The success which attended our natural treatment in the case of the Imperial Chancellor cannot but continually spur us on to press forward and procure for it the privileges which the restoration of the Imperial Chancellor to health proves it merits.

CURES, REPORTS OF.

(From the "Naturarzt," organ for Natural Hygiene and Treatment.)

Every one knows that health is the most important of earthly blessings, without which even the most precious gifts are usually worthless to us.

Therefore, preservation of health should be our most sacred duty; and the regaining of the same, as far as it has been lost, the most ardent desire of the sick person. But how is health once lost to be regained? There are various methods of treatment, but only one, if a cure is still possible, leads to the desired goal; that this is the Natural Method of Healing is nothing new to the readers of this journal.

I was very ill.*) My digestion was thoroughly disordered, the functions of the gastric juices arrested, sleep fled from my couch; I grew thinner from day to day, and had lost all courage and all joy in life.

With feverish longing I awaited the opening of the *Zimmermann* Sanatorium in Chemnitz. Public reports with regard to the arrangement of the Sanatorium justified the highest expectations.

Before its opening, I consulted the physician of Dr. *Lahmann's* Sanatorium. The expectations I had of this gentleman were exceeded, high though they were. I will pass over details, and only remark that Dr. *Lahmann* immediately succeeded in gaining my fullest confidence by the manner of his investigations, and by his kindly confident encouragement. It immediately became clear to me, and I was more and more confirmed in my conviction, that I was in the hands of a doctor who did not direct his attention to the physical man alone, but considered the whole being, and understood how to raise the broken spirit and encourage the faint-hearted. The written directions I received when I entered the Sanatorium were as follows:—Take no soup, drink nothing at the mid-day meal, drink one cup in the morning and half a pint in the evening; in other cases water to be drunk only when *very thirsty, and then by mouthfuls.*

I soon became accustomed to this diet, so much the more as I was permitted to eat meat, according to my old custom, and green salads and

*) The name may be obtained from the editor of the "Naturarzt."

stewed fruits were also allowed to me—up to this day, I follow, in general, this same diet, and, in consequence, find myself in good health. Of course, at first, things did not go so easily, and the mouthful allowed with severe thirst had to be taken very often. The contrast was rather marked; formerly, according to my medical treatment, I drank daily about three litres of milk (sweet) or butter milk, and now, a tumbler of beer in the evening. And what was the consequence? Quite remarkable. Even after a few days, I felt an appetite, of which all the dishes on a well served table had cause to be afraid. The long-absent, sound sleep once more set in, and, in spite of the daily sweating in a "pneumatic bath," the former constantly progressing, leanness stopped, and I began to put on weight. Even after a residence of eight days in the *Zimmermann* establishment, I had increased about four pounds in weight, and after four weeks a good nine pounds. And till now, having left the establishment six weeks ago, the result has shown itself to be a lasting one.

I am, it is true, not quite cured, but I know for certain that, with a strict observance of the prescriptions given me by Dr. *Lahmann*, I shall soon be in full possession of my former health. Certainly what the founder has constituted with painful trouble, the board of directors and the managers have faithfully attended to, have contributed materially to this result, as have also the model arrangements of the establishment; well ventilated, roomy apartments, suitably arranged bath, steam and pack rooms, as well as excellently prepared food in abundance, the healthy situation of the establishment, etc.

May the *Zimmermann* establishment become for all who visit it what it has become for me, a healing establishment. May Dr. *Lahmann*, whom I here heartily thank for his unwearied care in the restoration of my health, attain equally happy results with all the patients visiting the establishment for its honor and for the fame of the Natural Method of Healing.

TWO DOCTORS, A PROFESSOR AND A NATURAL HEALER.

(From the organ of the "Society for the Propagation of Public Hygiene.")

When two doctors, acknowledged to be clever, and a far-famed professor of the medical faculty, give up a patient and say that death is certain at an early date, he who dared to express as much as a doubt of such an opinion would, particularly if he were not a medical man, be looked upon as a charlatan. But if palpable, incontrovertible facts were to prove the prediction of these three learned gentlemen to be a fallacy, and if the

patient they consigned to an early grave got well again and revelled once more in the best of health—well, there would then be the consolation left that in the next case of a similar character, unless "quacks" interfere, medical science will be confirmed in its prognosis, because, to be sure, former cases of a like kind have generally proved to be correct.

A lady paid me a visit on September 27, 1878, to consult me about her little foster-child, aged three, the motherless son of a Mr. *Gunther*, manufacturer, of Chemnitz. She told me that he had been ailing for some weeks. Till then he had had a cheerful, happy disposition and a very active mind. A peculiar access of ill-humor and incessant cold, viscid perspiration, had led her to think that there was something ailing the boy. The doctor who had been called in had recommended change of air, and Mr. *Gunther* had caused her to take his little boy to visit the mountains in search of health.

In spite of the country air, however, and the most careful nursing, the child's health had become worse. The mental indisposition and the perspiration had both increased, appetite and sleep had diminished, and a weakness, which became very striking, affected his every limb. These symptoms had induced them to return to Chemnitz, and the boy had then been put under medical treatment. Medicines had been prescribed, applications of iodine made to his back, with ice-compresses to the same place; the diet had been very "nourishing;" raw meat, beef-tea, wine, etc. Still his condition had become daily worse. He could scarcely walk, could not get up from his chair alone, urinal and fæcal discharges passed without his knowing it, he had hardly any sleep, and his mental depression constantly increased. Seeing the boy's sad condition, the doctor had called in a physician, Dr. *O.*, but their united efforts had not been able to arrest the disease.

Acknowledging their helplessness, the gentlemen advised taking the boy to Prof. *W.*, M.D., in Leipsic, to have his opinion. This advice was followed. Prof. *W.* had seen the patient, had been informed of the most important points of the case, and had then directed that iodide of potash employed internally was to be changed for bromide of potash; to continue the use of iodine, to apply the ice-compresses to the head instead of the back, and to go on with the same diet. The boy, however, could not be saved; it was useless, therefore, to foster any hopes. With this consoling information they had returned to Chemnitz, and the two resident physicians had entirely endorsed the professor's opinion. Nor had the child's condition improved since; on the contrary, he grew worse from day to day, and his death was expected. His foster-mother now came to me in her anguish, without the father's knowledge, and implored my advice. I

ought for certain reasons to have refused my interposition, even if I could have offered her a scrap of comfort. But when I heard her description of the father's grief and despair at the prospect of losing in the gentle boy the dearest image of his deceased wife, and when I saw the tears of the anxious foster-mother, I threw all "certain reasons" to the winds, the feeling of pity got the upper hand of policy, and I commenced my inquiries, and learned that the boy's extremities were always as cold as ice, but that the stomach and head were hot. From this, and from the kind of prescription given by the doctors, I guessed that the gentlemen had most likely diagnosed "disintegration of the gray nerve substance." But what guided me was that the extremities were cold, but head and body hot, and that the skin was covered with cold, viscid sweat; that in the unequal distribution of the blood, and in the entirely prostrate condition of cutaneous action, the main cause of the disease was to be found. It was clear to me that with an equal distribution of the blood, with improved cutaneous action, and with relief afforded to the central organs and nerve trunks, improvement and probably recovery must be the result. I then stated the treatment I would adopt: A foot steam-bath (the steam to be produced by means of hot-water bottles), in the morning and afternoon; then rubbing the feet and legs with water of 73°, back and body with water of 80°; next putting him to bed with trunk pack and compresses on the legs (73°), and leaving him there for about two hours. I would then consider it proper to give the patient another rubbing in the manner indicated, and in the morning and evening a small enema (66°). At night, I should put him to bed with trunk and foot packs, leaving him in them as long as he was quiet. In regulating the diet, I should do away with wine, beer, meat, beef-tea, and substitute only very mild and non-stimulating food, such as stewed fruit and berries, of which he might eat as much as he desired; all medicines, ice-compresses, and embrocations, to be eschewed.

On October 4th, Mr. *Guenther* wrote to me that his housekeeper had told him my views touching his boy, that she had followed the injunctions which she had received from me, and that the different applications seemed to have done his boy some good. It would afford him great pleasure if I could conveniently pay him a visit and would see his child, etc.

Seeing no valid reason, either from a general, legal, or moral point of view, why I should refuse the invitation, I went when opportunity offered, and was received most affably. I found everything exactly as had been described to me, and as I had thought.

The father was highly gratified that, after the lapse of only a few days, a compress had had the effect of causing the little boy to sleep better, and at the same time of creating some appetite. But whilst the treatment

was continued—with only slight alterations—according to my instructions, and while the child's condition improved from day to day, the hope of ultimate recovery being therefore quite legitimate, the father told me the news that he had heard, through a third party, that the doctors prophesied some horrible sufferings to be yet in store for the little patient, and in the end of a lamentable, miserable death; but that they were afraid of making this sad communication to him direct. So much greater, he said, was his joy that everything took such a favorable turn. It gave me, of course, unbounded pleasure to see how symptom after symptom disappeared; how hands and feet, arms and legs, resumed their normal temperature; how the skin became fresh and got color; sleep became healthy and appetite strong; how the natural discharges took place again with the child's volition only; how the weakness, which had made him incapable of rising from his seat, vanished; and how his natural strength increased from day to day; how the peevish, fretful mind made way again for child-like cheerfulness; and how the little patient, under the influence of the simplest natural stimulants, and under a rational hygienic treatment, without medicine or ice, meat or wine, hastened with winged steps towards the full possession of health apportioned to him by the Creator; and how he obtained it, in spite of the prophecy of learned gentlemen to the contrary.

SAVED FROM DEATH IN SPITE OF SCIENCE.

(An extract from the periodical of the Society for the Propagation of Public Hygiene.)

Dr. *H.*, assistant master at the Royal Training School for Teachers in Zsch., a young man of twenty-eight, who had never known what illness meant, was on March 6, 1878, about mid-day, attacked with violent sickness, and convulsive shivers. The doctor, who was consulted next day, after examining the sputum, declared the illness to be inflammation of the lungs, which, with a normal course, would, he said, be quite over in a fortnight's time. For four days the disease retained about the same character, when an aggravation took place in consequence of pleuritis supervening. The patient, whose nearest relatives and the young lady to whom he was engaged, had hastily come to nurse him, was in an inflammatory fever, and began to be delirious. Twelve leeches were put on, helping to increase the weak state in which the patient already was, by withdrawing blood; and cupping was also resorted to. It was regrettable that the doctor, under whose treatment *H.* was, had to take a journey with a patient of his, thus leaving this man at a critical point in the hands of two other resident practitioners. In spite of the most careful nursing,

and the conscientious executions of the doctors' orders, *H.*'s condition got worse from day to day. On the twelfth day of the disease, both doctors pronounced him irretrievably lost, he being in one continued delirium. All this time the patient had conscientiously taken the medicines as they were daily prescribed, had drunk seventy-one bottles of seltzer-water, and used hot compresses as ordered. Yet death was to be the outcome of all this medical attention.

At this juncture of extreme peril, the patient was, by an enthusiastic admirer of the Natural Method of Healing, who himself had been cured before by Mr. *Canitz*, of Chemnitz, of some seemingly incurable eye disease, put almost forcibly and regardless of the mother's objections under the treatment of the Chemnitz practitioner. The above-mentioned gentleman, having with the utmost devotion and disinterestedness applied during the first night the compresses ordered by Mr. *Canitz*, who had been informed by telegraph of the circumstances of the case, the latter gentleman arrived himself the next day and gave the necessary directions. By uninterrupted applications of compresses on feet and calves, abdomen and body, and by frequent enemata, he, who had already been given up for lost, was, contrary to all expectation, placed out of danger within three days. He gained strength by a light vegetarian diet, stewed fruit and berries; and a copious expectoration cleansed the respiratory organs. A fortnight after the first compress was put on, he could leave his bed temporarily; and another fortnight after he could take his first walk abroad. Having spent the intervening time, from Easter to Whitsuntide, at his own home—during which time he completed his recovery by continuing with the strictest diet, packs and wet rubbings—he was able after Whitsuntide to resume his duties at school with his wonted energy, and has never since missed a single lesson.

It is evident that *H.* owes his recovery next to the Almighty to the natural treatment as practised by Mr. *Canitz* in Chemnitz, and taught in his admirable "Periodical of the Head Society for the Propagation of Public Hygiene." I hereby recommend him most warmly to every patient. *R. H.*

I would add to the above report the following particulars of the treatment applied in this case.

A telegram received from a former patient of mine, Mr. *Richter*, post office assistant in Zsch., summoned me on March 16, 1878, to go at once to Zsch., to see the senior assistant master, Mr. *H.*, who was seriously ill with inflammation of the lungs, and had been given up by the doctors. Unable to go at once, I sent the necessary instructions by letter, and went the next day.

Mr. *R.* met me at the station, and told me that the compresses on the chest (temperature 86°) and on the stomach (80°), had been applied by himself throughout the night, but that the wet rubbings could not be given so regularly, as they caused the patient excessive pain; and that for the same reason the cooling enemata had only been given twice; the fulfilment of the doctors' prediction, that death must shortly ensue, had, however, been averted.

The mother and the young lady present received me with tears in their eyes; they had by the doctors' dictum been robbed of all hope of seeing their dear one recover, his condition certainly appearing to warrant the prognosis of the learned gentlemen. Their opinion as to both lungs being attacked with inflammation, as well as to pericarditis, and pleuritis on the left side, could not be contradicted. The stomach was besides inflated, hard to the touch and painful; the skin dry, tense and burning hot, hands and feet cool; the head the same as the skin. The pulse was light and irregular, and the heat in the arm-pits 106°. Respiration was only bronchial, superficial, with a crackling noise, and accompanied by continual groans. There was not the slightest appetite; and the natural functions of the bowels and bladder were extremely irregular. The patient was unable to move his head or body, and an attempt to change his position produced a painful expression on the face of the sorely afflicted man. Sleep had long ago fled, and continual delirium proved to what extent his brain was disordered. He was teaching his pupils, talked of speeches and lectures, begged to be held, because he was "hovering in mid-air and was afraid of falling"; while all the time he kept pulling at his bed-clothes. The doctors had been right after all—*they* and *their* science could not arrest death.

I am sure it was due to their full conviction that they had everywhere in the town made it known that the death of *H.* was unavoidable and not to be averted; and that they characterized my arrival, for the purpose of preserving the life of the "dead man," as being an enterprise of folly.

"Mr. *H.* could not possibly live; if there had been any means of saving him, medical science would have done it. What was impossible to them, men of science, as they were, furnished with the rich apparatus of the whole Materia Medica, the Chemnitz quack could not make possible." It was thus these medical gentlemen publicly argued. Mr. *J.*, the director of the training school, whom I called upon and whom I informed of the nature of my errand, told me openly that he expected every moment the news of Mr. *H.*'s death, and that it was perhaps best to give up all attempts at saving his life. He said that the zeal and devotion

of the doctors had been beyond all praise, nevertheless their best endeavors had been frustrated. On my replying that from the examination I had just made of the patient, a ray of hope still seemed to me to exist, and that I did not yet deem it absolutely impossible to save him, the director looked at me very suspiciously, and advised me not to revive any buried hopes in the patient's friends, hopes which were past realization.

The patient's recovery proves that these hopes were realized by the application of the Natural Method of Healing.

On March 25th, I received from the patient the first letter in his own hand-writing, in which he said how his condition was improving from day to day. For want of space I must omit other details.

Further on Mr. *Canitz* writes as follows:

But what would have been the consequence, if this unprivileged "quack" could not have applied, or would not have been permitted to apply, the unprivileged method of healing? A young, happy life would have been destroyed, an excellent teacher would have been called away forever from the scene of his beneficent services, a devoted lover torn from his intended wife, a son from his mother, a friend from his worthy companions, a man put under ground, and all this under the ægis of therapeutics, sanctioned and privileged by the State, practiced "secundum artem" by learned and approved disciples of Aesculapius!

What would have been said, if all this had happened?

They would have lamented the departed man, and his family would have given him an appropriate burial, would have sung hymns at his grave and spoken consoling words on the necessity of condoling with others. And the medical science and its acolytes . . . ?

THE HELPLESS HELPERS.

(From the periodical "The New Art of Healing.")

In laboring zealously in the cause of sound, hygienic principles and the treatment of diseases, one is easily led to imply bad faith to one's opponents. For it seems as if learned medical men did not see, did not hear, and would not notice, plain, palpable facts, and as if they refused to learn any lesson taught by non-professional teachers. But the poorest have faith in their cause and sacrifice themselves for it. It is not morality so much as human intellect that suffers from scholastic education and from professional exclusiveness with respect to the progress of life and its ever new and vivifying forms.

A wretched case, reported from Barmen, serves as an illustration. Dr. *Meisenburg* was performing an operation on a patient on Monday, March 31st, and during it got a slight scratch on his right hand.

The very next day he was attacked with violent fever, but he felt no pain in his finger till the Thursday following. It increased next day, and spread over the hand, arm, and the whole of the right side, whilst the swelling kept pace with it. No less than six eminent doctors attended him. On the Monday following an operation was performed under the arm-pit by the head-surgeon of the Elberfeld hospital, Dr. *Thelen,* with the assistance of Dr. *Graf,* of Elberfeld, and Dr. *Kruell,* of Barmen. As usual, an improvement was stated to be the result. But death, inevitable with medical treatment in such cases, took place the very next evening.

Such a catastrophe could not have happened with the correct and timely application of the natural treatment. The case which I treated by the natural method, as fully described in No. 14 of the above-mentioned journal,—namely that of a person stung by a poisonous insect—was far more dangerous; for stiffness, paralysis, and a most painful swelling of the hand supervened after but a few hours, while with Dr. *Meisenburg* they did not appear for some days. The question may be asked, how we should have treated this case? The injured hand would have first been cooled in cold, pure water. The finger would then have been packed (as described in No. 7, after the restoration of warmth in the hand had been effected, either naturally or by the application of a local steam-bath; for it is an inviolable law in the natural method of healing that cold applications must never be made when the body is not warm. If the fever had continued, as is probable, trunk, or better still, partial baths would have been applied, till that had been mastered completely. After every such washing—for they are, after all, nothing but washings, and not real baths—care would have been taken to get the body warm. Finally, if the heat and redness had spread in spite of these measures, a full steam-bath could have been given with excellent effect. But it may be assumed with certainty that the latter was not at all necessary, in view of the slow progress of the disease and its originally trivial cause, leading to a tragic end only by reason of the doctors' ignorance. It is true the renowned natural healer, Herr *Constantin von Bistram,* has warned us against using full steam-baths in external blood poisoning, and Lieutenant-Colonel *Spohr* says the treatment should depend on whether blood poisoning is as yet limited to one individual part of the body, or whether it has spread to other parts. In the former case he confines himself to local applications, in the latter he advises full steam-baths. We think, Lieutenant-Colonel *Spohr* is right. Still we cannot look upon the application of the full steam-bath as a great mistake, even

in cases where a local one is quite satisfactory, as the danger, which Herr *von Bistram* dreads, of the poison spreading with the greater rapidity through the entire body, is more than counterbalanced by the vigorous stimulation applied to the system to eject the poison.

Great attention has to be paid to diet in the treatment of such injuries. Meat, spices, alcohol, and narcotics of every kind must be banished entirely from the table, since they only help to increase the irritation and the feverish condition of the blood. It is best to satisfy instinct, which rejects in more violent fever any kind of nourishment, and only asks for water, with the addition, at the most, of a few drops of lemon juice. Should appetite return gradually, fruit (of a rather acid kind), oatmeal porridge, and whole-meal bread form the most appropriate diet.

The sad Barmen case did some good for the Natural Method of Healing, in that it shook more violently than ever the faith in medical treatment, and gained new adherents for the Natural Method of Healing.

We may mention that Dr. *Graf* is the principal upholder in Germany of the privileges of the Medical Faculty, and the champion of compulsory vaccination.

Berlin, Dessauer-Strasse 31.

Lothar Volkmar.

Curvature of Spine, see "SPINE, CURVATURE OF THE."

Cuts, see "WOUNDS."

CYANOSIS, or the Blue Disease, arises from the blood being too highly charged with carbonic acid, which happens in croup, whooping cough, asthma; the face, hands, and feet assuming a bluish hue.

Cyanosis is, however, sometimes the result of a defective condition of the vascular system, *e. g.*, contraction of the entrance of the pulmonary artery into the heart, incapacity of the former to contract, faulty condition of the cardiac valves, etc. If the defect exists from birth a cure is impossible. If not, the circulation of the blood must be regulated as speedily as possible. Expanding the capillary vessels by warmth, and contracting the blood-vessels of the trunk by stimulating cold applied to the back, removal of the cause, in fact, are the means, by which a cure may be effected.

Cynanche, see "CROUP" and "DIPHTHERIA."

Cypticercus and Cysticercus Cellulosus, see "TAPEWORM COMEDONE."

Cystic Worms, see "TAPEWORM."

D.

Dandruff, see "IMPETIGO."

Day Blindness, see "EYE DISEASES."

DEAFNESS may be due to a congenital malformation in the auditory apparatus, and is usually attended with defective power of speech; it is more frequently, however, the result of various ear-diseases. In the latter case a cure is sometimes possible by the removal of the cause (see under "HARDNESS OF HEARING" and "NOISE IN THE EARS"); in the former case deafness is incurable.

Deaf and dumb people are usually unable to speak, because they do not hear, for in order to speak it is absolutely necessary to hear the speech of others. If a child, therefore, loses its hearing early in life, before it has learned to speak, it will remain dumb, though no malformation in the organs of speech be present.

Deaf Mutes, see previous article.

DEATH AND SIGNS OF DEATH. There are several characteristic signs, from which the fact of death may with some degree of certainty be concluded.

1. In order to detect whether respiration has ceased or not, the best method for unskilled persons is to hold a cold mirror before the mouth and nostrils. If respiration, however slight, be going on, the glass will be covered with moisture condensed from the exhaled vapor.

2. Circulation of the blood may be tested by tying a string tightly round a finger or toe; if the extremity assumes first a red and then a blue tint, life may with certainty be inferred.

3. Another test is to drop a little burning sealing-wax or boiling water on the skin; if the skin turns red or a blister be formed, leaving a red ground and rim after removal, this may also be regarded as an indication of life.

4. If the eyeball has lost its elasticity, and is soft and yielding to the touch, death may be inferred with some certainty; another sign is the so-called "rigor mortis" or cadaveric rigidity. This rigidity attacks the limbs gradually, and can only be overcome by applying a considerable force. Muscular rigidity or "rigor mortis" sets in generally two hours after death; it reaches its climax after six to eight hours, and again disappears on the third day or earlier.

5. The death spots, the first sign of decomposition, are a greenish discoloration of parts of the abdominal covering, gradually spreading over the entire abdomen, and thence to other portions of the body. The skin subsequently acquires a greenish-brown, dirty hue. The death spots appear especially on the places in contact with the supports on which the body rests. With drowned persons decomposition begins at the head with a brick-red color, which gradually turns a greenish-brown.

6. Further signs of death are: When on opening a blood vessel no blood flows out.

7. Putridity is rendered evident by a perceptible odor.

8. When the heart's action has completely ceased. This can be ascertained with the greatest certainty in the following manner (it was formerly supposed that the stethoscope afforded the best proof that death had taken place, since by its aid the faintest pulsation was audible; such, however, is not the case, and the following modus operandi is far surer):—A pin is inserted between the fifth and sixth ribs, counted from above, turning it a little to the left, so that the point of the pin touches the apex of the heart, half of the pin remaining outside the body; if life is not quite extinct, the pinhead will move slightly, though the stethoscope may have long ceased to reveal any sign of the heart's action. Such a slight prick is entirely harmless.

DECEPTIONS Practised with Quack Medicines, Pain Expellors, Patent Pills, Herb Teas, etc. See "NATURAL METHOD OF HEALING."

Decline, see "EMACIATION," "FLESH, LOSS OF," and "PHTHISIS."

DECREPITUDE is the state resulting from the natural decrease in vital powers, in consequence of old age.

Deep-Breathing, see "BREATHING EXERCISES."

Deep-Breathing Gymnastics.

Deep-Breathing in Curative Gymnastics, see Index.

Deep-Breathing, Lateral, see "BREATHING EXERCISES."

Deep-Breathing, One-Sided, see Index.

DEGENERATION is the deterioration and pollution of the humors of the body as well as the change of normal tissues and structures into morbid and corrupt ones.

DELIRIUM TREMENS arises in consequence of prolonged inebriety, and is especially liable to occur when alcoholic liquors are suddenly discontinued; they exercise their destructive effect mainly on the brain and spinal cord.

SYMPTOMS.—Trembling in the whole body, disturbed sleep, restlessness, quick pulse, wandering talk, peculiarly smelling perspiration, red eyes, nose, and cheeks. The patient has a constant feeling of dread and anxiety; he fancies himself threatened and pursued by thieves and assassins and is tormented by visions of rats, insects, reptiles, etc., pursuing him.

TREATMENT.—In acute attacks a lukewarm (88°) bath, gradually reduced to 73°—77° (tepid) by adding cold water, should be tried, with cold compresses round the head, particularly before the patient gets into the bath; head and spine affusion, especially while in the bath, with vigorous friction of legs and calves, in order to soothe him. Also a sedative full-pack, immediately followed by friction, is useful (but the patient must not be forced into it, or else fresh attacks may easily supervene).

Total abstinence from all alcoholic beverages must above all be at once insisted on if possible, or these may be given him in gradually diminished quantities. (With proper treatment the sudden cessation of all intoxicants will hardly ever do harm.) Spirits especially must be discontinued as soon as possible; a cup of black coffee may be substituted at the beginning of the treatment. Efforts should, moreover, be made to counteract the depression arising from the discontinuance of his accustomed beverage by abundance of exercise, if possible in the open air, attention to the action of the skin, open windows at night, etc. Finally strengthening treatment should be resorted to. (See "DRUNKENNESS.")

The abusè of tobacco, if continued for a long time, seems also to occasion similar symptoms, *e. g.*, disorder of the brain and spinal cord. (For Modes of Application, see Index.)

DELIRIUM (WANDERING). This term is applied to irrational talk and wild fancies. These symptoms are usually met with in inflammatory, or feverish diseases of the blood, such as typhoid fever, etc.; also in cases of deep wounds, after child-birth, etc.

With the reduction of the fever, or the removal of the causes, delirium generally disappears.

If the disturbance of mental activity be permanent, continuing after the removal of the feverish condition, it is then a case of mental disease. (See "MENTAL DISEASES.")

The following treatment is applicable to delirium: Rather wet, soothing full or three-quarter pack, with a hot-water bottle wrapped in

wet cloth to the feet. Duration, about half an hour to one hour. In severe cases this treatment must be at once repeated, always wrapping the head, when hot, in a towel wrung out in cold water, or cooling it with the hands dipped in cold water.

In lighter cases the pack should be repeated, whenever delirium returns; small derivative enemata must also be given. (For Modes of Application, see Index.)

Delivery, Normal Time of, see "WOMEN, DISEASES OF."

DENTAL FISTULA is a small passage, starting mostly from the root of the tooth, piercing the cheek, and allowing matter to trickle through. This wound or passage usually closes soon after the removal of the affected tooth or root.

DEPRESSION is a feeling of tiredness or indifference, disinclination for anything. At times such a state intimates the approach of an illness, or it may be the result of over-exertion of body or mind.

TREATMENT.—Rest is absolutely necessary, and gentle exercise in pure, fresh air, and in the sunshine when possible. Two lukewarm (72° to 77°) wet rubbings of the whole body should be applied daily, and steam-baths in bed, application No. 3 or ordinary steam-baths—either of which is followed by a bath (88°)—will be found beneficial, as will also a hip-bath (77° to 88°), or spray (72° to 84°), or douche (66° to 88°).

Massage of the whole body, stroking, rubbing, kneading, slapping, should also be employed daily, and passing gymnastic exercises gone through. The treatment should be strictly individualizing, and be mild and gentle at first, and gradually become colder, as circumstances require.

When the disease, of which the depressed state was the harbinger, becomes known, then the treatment prescribed for it should be applied. For Modes of Application, see Index.

Derivative Massage, see Index.

Derivative Treatment, see Index.

DESQUAMATION. After diseases, such as measles, scarlet fever, etc., the skin dries and scales or peals off in smaller or larger pieces, like scurf. This is called desquamation.

Diabetes Insipidus, see "POLYURIA."

DIABETES MELLITUS. In this disease, which does not occur very frequently, enormous quantities of sugar (from one to two pounds) are excreted from the body, principally with the urine, but also with perspiration, stools, etc. The quantity of urine discharged is in the same

ratio as that of the sugar, and to the extent of ten to twenty pounds, in some instances even beyond that per day. It occurs either as an independent disease, or in the train or as the result of other disorders, especially tuberculosis. The male sex, between the ages of twenty to forty, is mainly liable to it. A perverse mode of life, sexual excesses, drinking sour wine and must, and partaking altogether of too much sour food and drink, favor the development of this disease. The general opinion is that liver-complaint is the cause of it, since sugar is formed in the liver, in health. The existence of this disease is only discovered when already fully developed, and when, in the opinion of most medical men, it has become incurable.

SYMPTOMS.—A large quantity of sugar and urine is discharged by the patient. The system tries to re-adjust the balance by an increased consumption of nourishment and drink, the result being an appetite increased to an extraordinary degree, and an almost unquenchable thirst; a further symptom is emaciation, often attended finally by phthisis. The urine also gradually assumes a peculiar hue (clouded, with green opalescence, and whey-like), passes more frequently, and increases gradually to a huge amount within twenty-four hours. Its smell and taste vary most remarkably, as is also the case with its color and quantity. The smell, instead of being strong and ammonia-like, is insipid, and the taste sickly sweet. When inspissated, the sugar may even be crystallized. Other signs are, disturbed digestion and constipation, extreme emaciation, general debility, melancholia, whimsical fancies, extremely dry and harsh skin, sometimes exfoliating; sensation of dryness in the throat, mouth, and gullet: alteration in the retina and in the lens of the eye, etc.

TREATMENT.—Steam-bath in bed, from two to four a week, followed by a (73°) vigorous full friction or (87°) bath. Abdominal compress at night and (73°) full friction in the morning.

Fresh air, non-stimulating diet, enemata, etc. See below.

ANOTHER TREATMENT.—A tepid (73°) abdominal compress every night and a (73° to 77°) wet rubbing of the whole body every morning, or a bath (85° to 89°) every other day.

Entirely non-stimulating and unseasoned diet, in order not to provoke thirst, and enemata for constipation. Also strengthening treatment.

As much fresh air and out-door exercise as possible, well-ventilated rooms with open windows at night.

In advanced stages of the disease the applications of water must, by reason of the poor condition of the blood, be as gentle as possible. (For Modes of Application, see Index.)

If the patient's condition permits, massage, curative gymnastics, gymnastics in general, and other exercises may be resorted to with good result. Dr. *Schreiber* says in his work: There are cases where muscular exercises must be postponed or forbidden altogether. In others, again, it might be of advantage to replace active movements by mechanical manipulations (pressing, kneading, hacking), or to let the latter precede the former. *Zimmer* has observed very severe cases of diabetes mellitus, in which muscular exercises were attended with good results, at any rate changing the dangerous form into a mild one, and he arrives at the conclusion that the result of a muscular exertion is in many cases more permanent than the diet formulated by Rollo.

The point to be aimed at, in this disease, being the vigorous exercise of the entire muscular system, those gymnastic exercises will be found most expedient which give an equal amount of employment to all the larger muscular groups. For this reason exercises are recommended, which are performed with the apparatus to be met with in all gymnasiums, such as horizontal bars, slanting ladders, suspended rings, etc. These exercises must be practised systematically and in proper order; of other bodily exercises, riding and fencing may be attended with benefit to the patient.

PROGRESS IN THE ART OF HEALING.

When it is asserted that diabetes mellitus is curable, people are at first inclined to shake their heads incredulously; nevertheless it is an established fact, incontrovertibly proved by fourteen years' experience, that this malady, supposed to be incurable, is capable of being radically and permanently removed, not, indeed, by medicines, but by a strict systematic dietetic regimen. Dr. *von Duering,* in Hamburg, has rendered mankind an inestimable service, and a number of former patients, among them several colleagues, who are working now in health and vigor, attest the truth of the assertion. The modus operandi is as simple as possible, and intelligible to the most ordinary understanding. *Duering's* publication, "The Cause and Cure of Diabetes Mellitus," describes it at great length. The Vienna medical press says regarding it: "This pamphlet contains not only for the therapeutics of diabetes mellitus, but also for the practical guidance of the profession, so much that is interesting and worthy of serious reflection, that its study cannot be too warmly advocated. The doctrines enunciated therein are of priceless value, and, although clashing to a great extent with old ideas and prejudices, they nevertheless open out a prospect of highly satisfactory results to practical therapeutics, and on

that account may be hailed as a god-send by both, doctors and patients. Faith in medicine, it is true, receives a rude shock by this publication."

CURE OF DIABETES MELLITUS.

(From Dr. Körner's book: "The surest cure of febrile diseases.")

I had long suffered from diabetes mellitus, and I could find no help even in Berlin. I was advised by Mr. *Boldt* in Swinemünde to consult a Natural Healer. Dr. *Koerner,* who had relieved him of painful and swollen feet, for which he had been unable before to find a remedy, and—thank God!—he has also completely cured me of my disease.

H. Assmann, Ferry-Man at Ostswine, near Swinemünde.

DIAGNOSIS is the art of recognizing the presence of a disease. In making his diagnosis the doctor is guided by various characteristic symptoms, as well as by the patient's answers to his questions. Not only is the physician able to determine the disease accurately by his sense of vision, but from many circumstances, such as the patient's complexion, his expression, or the position of the body, he is enabled to gain an insight into many inward processes.

Diaphoresis, Artificially Induced Perspiration.

DIAPHRAGM. This is a diagonally striped independent muscle which also performs its functions automatically during sleep. Its films form in their totality a muscular skin, on the convex surface of which lies the serous pleura, and on the concave the serous peritoneum. The diaphragm is, next to the heart, the most important muscle, the activity of which consists in a constant rising and falling, by which the thoracic cavity is contracted and expanded, the air streams in and out of the lungs, whereby breathing results. Moreover, the activity of the diaphragm influences the rise and fall of the muscular systems of the abdomen and the intestines, and causes constant movement of the contents of the intestines, *i. e.,* evacuation of the bowels. The activity of the diaphragm cannot be controlled by any other muscle, and on this account a cessation of the movements of the diaphragm must cause instant death. Diseases of the diaphragm are very rare; whenever such occur, they are generally the result of other ailments, such as pleuritis, peritonitis, etc., whereby the inflammatory matter extends to and attacks the diaphragm. The treatment of diseases of the diaphragm must be entirely considered in relation to the primary cause; they must consequently be treated as pleurisy or peritonitis.

DIAPHRAGM, INFLAMMATION OF THE. The diaphragm is the muscle forming the partition between the thoracic and abdominal cavities, and plays a most important part in respiration, the thoracic cavity expanding in consequence of its contraction, and diminishing in consequence of its relaxation. Inflammation of the diaphragm sometimes accompanies muscular rheumatism, and the diaphragm is also frequently involved in acute pleurisy or peritonitis. Its symptoms are vague (pains, spasmodic sobs, a drawing pain in the region of the diaphragm when taking breath, painful laughing fits). The diagnosis can only be formed with difficulty.

TREATMENT.—Local, soothing abdominal compresses, or trunk-packs, alternating with a stimulating and derivative treatment. Also steam-baths in bed with a soothing extra-compress on the abdomen or chest, according to the patient's condition. Gentle massage of the diaphragm, commencing under the back, and applied with somewhat more force over the abdomen. The treatment must for the rest be one bearing upon the primary malady. (For Modes of Application, see Index.)

DIAPHRAGM, SPASMS OF THE, also called hiccough, arise in the majority of cases from an excessive expansion of the stomach, overloading it with food and drink, eating and drinking too fast, accumulation of gases in the stomach, etc.; and generally passes off without any serious consequences. However, there are cases, in which the causes lie in nervous disturbances, as, *e. g.*, in hysteria, severe neurasthenia, tumors on the brain, etc. Should the exudations of pleurisy extend to the diaphragm, a very painful and protracted hiccough results. In the last-named cases, a dangerous state of exhaustion may be caused by reason of sleep being disturbed, and the taking of food prevented. The peculiar intermittent hiccoughing sounds arise from the sudden contraction of the diaphragm, whereby the air rushing past the partially closed vocal cords is arrested by these suddenly becoming completely closed.

TREATMENT.—An old, but excellent remedy for the hiccough is to stop up the ears tightly with the little fingers, and, at the same time, to take several successive mouthfuls of some fluid (water, lemonade, milk, etc.); this invariably stops the hiccough at once. Another good remedy is to swallow three times without taking breath. In case of infants, warm cloths, applied to the abdomen, and warming of the feet will prove effectual. In serious cases, where the hiccough appears as the resulting symptom of other ailments, the treatment must be adopted to the primary cause.

DIARRHOEA arises partly from inflammation in the digestive organs, partly from obstructing masses of excrement being firmly lodged in the

folds of the large intestine (thus preventing the absorption by the latter of the contents of the small intestine), also by indulgence in certain articles of food and drink. It is frequently caused, therefore, by errors in diet, as well as by a cold in the stomach. It also accompanies various diseases, such as cholera, dysentery, etc. Diarrhœa consists in frequent, liquid evacuations. These may be of a watery character, intermingled with hard, fetid masses of excrement, or with small remnants of undigested food; the latter is a serious symptom, especially when, as with babies, undigested milk passes off in the form of curdled gaseous masses. Sometimes the evacuations are entirely fluid. The complaint must then not be treated lightly in the case of infants, especially when the evacuations are frothy at the same time.

Evacuations, when streaked with blood, are an indication of dysentery; when clear, of piles; when chocolate-colored, of typhus and intestinal tuberculosis; when black and like tar, of gastric hemorrhage, etc. The evacuation, therefore, may vary considerably in appearance and composition, according to the underlying disease.

Treatment.—The treatment must, in the first place, be directed to the removal of the primary disease. Warm compresses, combined with foot steam-bath in bed; next, massage with the hands, previously dipped in cool water, followed by a (77°) tepid abdominal compress. Small, cool enemata should be frequently given, particularly after stools.

If diarrhœa makes its appearance independently of any other disease, and especially when it results from faults of diet or a cold, vigorous and repeated friction of the abdomen, or (66° to 77°) cool enemata (one gill) and abdominal compress at night will very often suffice to suppress it; or food may be abstained from, and the beverage confined to pure water, till the diarrhœa ceases (man can live without food for days without injuring himself), but in this case the resumption of solid food must take place gradually, only small portions being taken at first. In the other case, the diet must principally consist of semi-liquid food. If the diarrhœa should be obstinate, enemata, containing starch in the shape of water-gruel, etc., may be given (temperature 80°), from about five to eight spoonfuls, especially when the diarrhœa is accompanied by want of appetite or loss of strength; after every stool, however, a small enema of pure water should be given. A (70°) wet rubbing of the whole body, succeeded by a blanket-pack (dry-pack) of half an hour's duration, can also be strongly recommended. Further information about this will be found under "Cold in the Head." Violent diarrhœa may also be treated with warm hip-baths. See also "Catarrh of the Intestines," also "Constipation." (For Modes of Application, see Index.)

Siegert says in his book, "On the Different Modes of Application": Astringent medicines (in most cases very violent opiates) sometimes cause the diarrhœa to disappear by paralyzing the muscles, ***but do not remove the cause.*** In consequence of this procedure, other, mostly very severe, forms of disease (only too often ending fatally) are occasioned. If, on the other hand, abdominal compresses (in light cases only at night, in more severe ones also in the day), and after every stool a cool, derivative enema be given, then those substances, which act irritatingly on the mucous membranes, are diluted and washed away; the walls of the intestines are cleansed, the inflammation is mitigated, obstructing masses of excrement are dissolved and ejected, and all danger obviated. Sometimes (more especially when gripes come on after every motion, causing a desire for stool) it is necessary to give a larger enema (72°) previous to the derivative one, in order to cleanse the intestines thoroughly. Thin remains of excrement are frequently passed after the former, and then only should the latter enema be applied.

Diary of an Infant, see "SUCKLING."

DIET. This term includes regimen, hygiene, and food. It must be regulated with especial care in the case of sick persons, for nothing contributes so much to the successful result of treatment, as a proper diet. Everything, therefore, that the patient takes in the form of food and drink must be exactly adapted to him. In most cases a non-stimulating or invalid's diet, instead of a mixed diet, should be prescribed. If this be attended to, it will never happen that a physician is suddenly summoned to a woman in child-bed, whom he has left in perfect health the day before, because she has fallen very ill with a feverish gastric or intestinal catarrh. What has happened? At the persuasion of some neighbor, she has made a hearty meal of some rich and indigestible food. Or the physician is suddenly summoned to the bedside of a convalescent patient because a relapse has taken place in consequence of a hearty meal of indigestible stimulating or unsuitable nourishment having been indulged in.

Dietetics, see "HYGIENE."

DIET, DRY, consists in depriving the patient for some short time not only of every form of beverage, but of every article of food containing much moisture. The aim is to make the system itself absorb all the bad humors circulating in it, thus inducing an exceedingly beneficial process of blood-purifying for the whole body. For further information on this subject, see "REGENERATIVE TREATMENT."

DIET, MIXED. By this is understood a diet consisting of vegetables, pulse, dishes made of milk, flour, eggs, salad, stewed fruit, or berries, etc., with bread and a little roast, steamed or boiled meat (roasted or steamed meat is preferable to boiled). The various vegetables are served up with lard, suet, butter, Dutch herrings, eggs, etc., instead of with meat.

Vegetables, etc., include: rice, millet, ground wheat, groats, peeled barley, vermicelly, dumplings, the various dishes prepared from potatoes, flour, milk and eggs. Butter, cheese, curds, sausage, Dutch herring, etc., are included under mixed diet.

Beverages are: water, milk, butter-milk, lemonade, beer, wine, coffee, tea; in fact all those generally taken.

If a mixed diet be prescribed for a patient, as is generally the case, meat, beer, wine, spices, coffee, tea and all stimulants must be taken in moderation only. Vegetables, bread, stewed fruit, etc., must always form the staple, and meat taken only as an adjunct to it.

Though many Natural Healers almost invariably prescribe a non-stimulating diet for their patients, and forbid a mixed diet, many, on the other hand, prescribe a mixed diet in various diseases (especially in chronic complaints) with very good results.

Here, as in every treatment, the main point to be kept in view is to individualize carefully, *i. e.*, in every case to consider what kind of nourishment, whether mixed, non-stimulating or invalid's diet, is the most suitable for the patient.

In a good many cases a mixed diet is ordered from the very beginning of the treatment; in other cases only when the patient's condition has somewhat improved and a gradual change can without injury be made from a vegetarian to a mixed diet.

For the purpose of specifying and supplementing the different items of mixed diet I refer in the first instance to the recipes of the non-stimulating diet, and after touching upon some other point furnish several recipes from the little books on cookery of *E. Petzold*, entitled "The Little German Cook," published by *E. Schneider*, Dresden, also ***Katharine Siegl's*** book, "The Middle-class Cook." published by *C. Flemming*, Glogau. I can confidently recommend these two books on account of the large number of recipes for a simple, economical, but withal good, palatable fare which they contain, and on account of the many useful hints on house-keeping, especially as the price is a low one. See "How to Steam, Roast, Bake or Boil Meat," also "Stoves, Heating and Cooking," and "Practical Cooking Utensils."

THE INJURY DONE BY PARTAKING OF HOT FOOD AND DRINKS.

Dr. *Glaser* publishes an article in the journal for public hygiene, which contains much that is worth taking to heart. It is incredible how obstinately housewives and cooks cling, more than to any other abuse of the kitchen, to the bad custom of letting its products be masticated and swallowed only in a state of excessive heat. Serving up viands boiling hot has become a vice of the kitchen. On this point I have never yet succeeded, even in my own family, in arranging a tolerable compromise between housewife and guests.

On one occasion I could endure it no longer, and, soup and coffee being again served up in a boiling state, I took the thermometer from the wall and to the terror of the lady of the house dipped it into the soup tureen. That settled the matter. The thermometer showed 157°, *i. e.*, higher than blood heat. A broth of 157° would scald your feet if poured over them; to bring it into contact with the tongue and teeth is cruelty to animals; everybody ought to see that and yet it never occurs to anybody.

Water of this temperature applied to less sensitive parts of the body than the mucous membrane of the mouth and the enamel of the teeth, *e. g.*, the epidermis in fact, would be equivalent in boiling, and yet the mouth, with all the organs it contains, has to put up with such unmerciful scalding just because it is the custom of the kitchen and the tyrannical domestic dictum of the lady of the house! With what pedantry does the guest at a bathing place cause the 86° or 88° of his principal bath to be taken with a thermometer! How he would abuse the attendant, and rightly so, if he were to increase his bath to 120°, and yet this same guest bathes his mouth and stomach every day at the dinner table with a broth and with vessels of food of 145° and over, and thinks nothing of doing so! The purpose of these observations is to wean our hot-blooded cooks from serving up our meals boiling hot. It is really very funny to see how, at a dinner-table, everybody makes his peculiar grimace at the first spoonfuls of soup which he carries to his lips. He wrinkles his forehead unconsciously and contorts all his facial muscles. I have sometimes wished to have an instantaneous photograph of a company at dinner, just as they are going to discuss a hot dish with spoon or fork. If our domestic animals could see us human beings sitting at table before steaming hot dishes, puffing and blowing, pushing hot pieces of potato down our throats like fire-eaters, how they would shake their heads over our irrational proceedings! Once at a farm house, about dinner time, I saw a peasant woman boxing her daughter's

ears because she was about to put a pailful of hot bran-mash into the cattle-trough. She asked her at the same time whether she wanted to kill the cows or make them ill? And yet this same woman, who was so concerned about the cows, put the next moment a dish of steaming hot cabbage, fresh from the fire, on the table. The company, impatient with hunger, carried out before my eyes the funny game of grimaces over the fiery ordeal, the sight of which had often amused me before. Young and old screw up their lips over the hot spoon; then follows a universal blowing, sniffing and sipping, a whistling and hissing, as if the meal were a punishment. It is just as if our object were to find out with our tongues and teeth at every meal the exact point at which the mucous membrane would get scalded and the enamel would burst, so intent is everybody upon filling his mouth with the first pieces as hot as they can be borne, and letting them dance up and down between the jaws and upper teeth. The first and immediate result of this abominable tyranny of the kitchen, this fire-eating, is the universal wretched condition of our teeth, with all its injurious consequences to our health. The whole host of dentists lives chiefly on the mischievous practice of cooks of serving the meals at a temperature of 120° to 160°. An investigation is still going on into the cause of the upper teeth decaying as a rule earlier than the lower. This is supposed to be due to the chemical action of the saliva protecting the lower teeth with which it naturally comes into more immediate contact. But we have only to observe the course taken by a hot piece of food, just carried into the mouth, to make it clear that this destruction of the enamel of the upper teeth is, in the main, nothing but a purely mechanical process of splitting caused by sudden and extreme changes of temperature in the mouth. The hot morsel is in the first place tossed about on the back of the tongue by an involuntary movement on the lingual muscles which acquire a wonderful agility in course of time, and jerked against the upper teeth like a billiard ball against the cushion. The immediate result is that the upper teeth are the first to get cracked, and this process naturally takes place first at their inner edges facing the mouth. Just as in glass-works, the slightest momentary touch of the glass cylinder with the testing hammer is sufficient to crack the whole cylinder in a moment, so will hot food, prepared by a careless housewife, when brought into even momentary contact with the tooth, widen the crack in the enamel more and more, and facilitate the admission of substances injurious to it, as sugar, acids, etc. From these considerations on the injury to our health caused by hot food and beverages we draw the conclusion: If our wives and cooks cannot be prevented by any other means from

serving up excessively hot meals, let us make them a present of a kitchen thermometer at Xmas, so that they may be able to regulate the temperature of the viands before sending them to the table. People who have lived to a great age tell us that they have never in their lives taken their food or drink hot.

Diet, Mixed. (Soups.)

APPLE SOUP. Pare eight to ten apples of a good sort, cut into quarters and take out the pips. Boil them till soft, with five pints of water, heat and rub them through a sieve, add sugar, cinnamon, also bread-crumbs or biscuits, according to taste, and boil the whole up for a short time. When served, put sugar and cinnamon over it.

BEER SOUP. See "DIET, NON-STIMULATING."

CAULIFLOWER SOUP. Take three fine, white heads, clean them, cut them into nice pieces, and boil them for from fifteen to twenty minutes in good broth, put a piece of butter into a saucepan, let it get warm, add two large spoonfuls of flour and let it just rise a little; then pour the liquid of the cauliflowers on it, and add a little pounded mace and two spoonfuls of sour cream. Before serving, add the cauliflowers and fricassee the soup with two yolks, and pour over fried bread. (From *Siegl's* Cookery-Book.)

CRANBERRY OR BLACKBERRY SOUP. Wash the berries and boil soft in water, then add plenty of sugar, some cinnamon and cloves, and boil again a short time. Serve on fried slices of roll or cubes of bread or add, while it boils, some potato-flour stirred in water. May be served cold in this form.

EGG SOUP. Grate some stale roll, whisk two eggs well together, melt some butter and some grated nutmeg, stir all together, pour into about a quart of broth or water (if the latter, more butter must be taken), boil well and stir constantly.

FLOUR SOUP. Two spoonfuls of flour and a small onion should be browned in butter; put it into a quart of boiling water (with some salt) or broth; boil for a few minutes, and serve on slices of bread or roll. Another recipe will be found under "DIET, NON-STIMULATING."

HERB SOUP. Chop spinach, common yarrow or milfoil, parsley and chives fine, and fry in butter for a few minutes; stir with one egg, salt and a spoonful of flour into broth or water, and boil for a short time (if no broth is used more butter must be taken). Serve on slices of bread fried in butter.

LIGHT SOUP. Make a dough of a few spoonfuls of flour, two eggs and milk. Let it run over the spoon into boiling broth or water (in the latter case with the addition of salt and butter and boil the whole for a little time).

MILK SOUP. Boil milk (as much as required); add a few spoonfuls of flour, whisk an egg into it, and then serve over sliced bread or roll. Another recipe will be found under "DIET, NON-STIMULATING."

MOREL SOUP is made in a similar way. Scald the morels, cut off the sandy stalks, wash once more, cut small, steam in butter, put into boiling broth and boil ten minutes. Whisk two yolks and one whole egg in some water, and put with a little flour and parsley into the soup, spice with nutmeg, and boil again for a little while. (From *Petzold's* Cookery-book.)

MUSHROOM SOUP. Take fresh or dried mushrooms, clean them well, wash, boil, drain, and chop up small. Meanwhile make some brown flour (frying a few spoonfuls of flour in butter) and add an onion cut into slices. Pour boiling broth (or water with butter) on the chopped mushrooms and the browned flour and add chopped parsley, ground spice and pepper. Boil for about ten minutes.

HOW TO ADD MUSHROOMS TO SOUP. Clean them, cut into thin slices, put in salted water for fifteen minutes and throw them into the soup while this is still boiling. Cockcomb's mushrooms are the best for this purpose. They may also be boiled with ham and breadcrust.

PIGEON BROTH. Truss and cut up a pigeon, and boil for about two hours in a pint of water. Then strain the broth and flavor to taste (without pepper). A spoonful of flour, moistened with broth, is added to the broth. Breadcrumbs may be taken instead of flour.

POTATO SOUP. Cold, boiled potatoes are grated. Throw them with a little salt into boiling water, boil for fifteen minutes, add a few spoonfuls of browned flour, some butter and bacon, or fried cubes of bread (add, according to taste, a few spoonfuls of cream to give an additional flavor to the soup). Another recipe will be found under "DIET, NON-STIMULATING."

PUMPKIN SOUP. Pare the pumpkin and cut into pieces (removing the fibres); boil soft in milk or water, rub through a sieve and serve with butter, sugar, cinnamon and salt. Toast is usually added.

SOUP OF HIPS AND HAWS. Wash a pint to a pint and a half of hips and haws (having previously taken out the seeds and fibres); pour three pints of water on them, add whole cinnamon, lemon peel

and a few cloves, boil soft, rub through a sieve, add sugar and lemon juice, also some wine, if agreeable, to improve the taste, and serve on toast or biscuit.

VERMICELLI SOUP. Drop about three ounces of vermicelli, breaking it in two, slowly into about a quart of boiling broth, raising it continually to the surface with a spoon, boil about fifteen minutes, and serve with a little grated nutmeg. For another way, see "DIET, NON-STIMULATING."

WATER SOUP. 1. Cut bread or rolls into slices, pour boiling water over them, add salt and a piece of butter and boil for a few minutes.

2. Take celery, porret or green-leek and parsley, boil soft, add slices of bread, salt and butter, and boil again. See "BREAD SOUP" under "DIET, NON-STIMULATING."

Diet, Mixed. (Soups with Dumplings.)

DUMPLINGS MADE OF WHOLE-MEAL. Stir and beat a quarter of a pound of butter till frothy, then beat two or three eggs (adding one or two yolks, if agreeable) into it; add salt and whole-meal enough to make a dough, not too stiff, let it stand for thirty minutes, cut off dumplings, the size of eggs, and boil them in hot broth for fifteen minutes. If left near the fire for another fifteen minutes, they will rise to twice their size. They will be very light, if they have boiled well. They may be given as a side dish, but in that case boil them in hot, salted water, instead of in broth; put fried breadcrumbs over them, and fry them in hot butter. (From *Petzold's* Cookery-Book.)

MEAT DUMPLINGS. Cut away all the gristle from lean pork and veal, cut into cubes, chop into fine sausage meat, add eggs, salt, nutmeg, grated orange-peel, and breadcrumbs, and stir together; if too stiff, add another egg. Make small dumplings of it, boil in broth, till done, or put them on a tin after rolling them in melted butter and breadcrumbs, bake or fry them in a frying pan. They are most palatable, and may be served in brown soups. (From *Siegl's* Cookery-Book.)

SMALL FLOUR DUMPLING. Beat six ounces of butter till white, add gradually from four to six eggs and wheaten flour, so as to make a moderately stiff dough, make small dumplings of it, and boil in boiling water.

SOUP WITH LIGHT DUMPLING. Melt two ounces of butter in a saucepan, and add half a pint of milk. Let it come to boiling point over a slow fire; then add a cupful, or more if required, of fine flour, keep stirring constantly, or at least till it separates from the sides of the pan and

forms one large dumpling. Take it from the fire, let it get cold, add two eggs and one yolk, some nutmeg, and work all together. Then put on paste-board to the thickness of about two inches, cut out cubes with a spoon, dipped in hot broth, and boil them from five to eight minutes in salted water. Put them into a soup tureen, pour a clear-white or brown soup over them, or a herb soup. (From *Petzold's* Cookery-Book.)

How to Steam, Roast, Bake or Boil Meat.

To have palatable, easily digestible, and nutritious meat, it is better to steam, roast, or bake than to boil it. If it be desired to boil it, put it into boiling, instead of cold water, otherwise, when gradually got up to boiling point, all its best juices are drawn out, the fibres get hard and tough, and the meat is unpalatable and hardly digestible. Dr. *Munde* states in his book on hydrotherapeutics, p. 106:

If the meat, and not the soup, is to be eaten, put it into boiling water, and, if possible, take one solid piece of meat for it, into which the boiling water cannot quickly penetrate, as it forms at the beginning a hard layer around it, preventing the soluble parts from escaping. Do not boil the meat for a longer time than necessary to make it palatable. Even should it be firmer to the touch than soup meat when done with, it will cut more easily, taste better, digest sooner, and afford more nourishment. The gravy obtained from it is sure to be poor, but will, nevertheless, contain some of the juice. In boiling meat, however, it is quite impossible to have both, a juicy piece of meat and a strong gravy. We must choose between good meat and poor gravy, or the reverse. A strong beef-tea may be made by cutting the meat up into small pieces, adding cold water, and boiling slowly and for a long time. But the meat, thus deprived of all its juices, is insipid, indigestible, fibrous, and almost tasteless.

A better plan than boiling it quickly is to steam, roast or bake it. (In some parts meat is roasted on a spit, by doing which it retains nearly all its juices, the heat forming at once a kind of crust around the whole piece, cooking the outside, and leaving part of the inside raw; it is, however, very palatable. Meat is rarely roasted on a spit, or roasting jack, in Germany, but frequently in England and America; every cooking stove in those countries being provided with that apparatus.) We recommend steaming the meat in *Kuntze's* quick-roaster, adding either a little water, or, better still, a little butter (previously browned in the vessel), before putting the meat in, as by doing so we make the vegetables more savory.

Steaming the meat (in a closed vessel, with a little water at the bottom) is half-way between baking and boiling, as it is cooked by the steam

surrounding it, and without losing much of the juice. Steamed meat, therefore, is more juicy, nutritious and wholesome than boiled. If, in steaming it, butter, fat, oil, etc., be used (stewing the meat, in fact), it will, likewise, remain juicy. *Dr. Bock.*

It is important to add salt in the beginning, as it enters the soluble parts of the meat, helps to dissolve them, and renders the meat itself more palatable, if it is to be eaten. Coarse-grained meat is made more tender and digestible by adding a little vinegar, or by exposing it to the air. *Dr. Munde.*

To have meat properly boiled (fresh or salted) it is necessary to put it into boiling water, so that the eatable albuminous substances may coagulate, closing up the channels which contain the juices. After boiling meat for about twenty minutes, it must be left to simmer for another two minutes at a moderate fire; the broth is then certainly poor, but the meat is succulent, tasty, and digestible. *Dr. Meinert.*

BOILED BEEF. Take a good piece of meat, as much as required, wash it, but do not leave it in the water, beat it a little, and put it into salted boiling water, boil from two to four hours, according to size. Skim it continually, when beginning to boil, till it is clear. If the broth is to be palatable, add carrots, celery and parsley roots, onions, whole pepper, and bay leaves. Keep it always covered with water, or add boiling water, if the broth has boiled away. Strain the broth and use it as soup or stock. Take two quarts of water to every pound of meat, and half a large spoonful of salt. Put it on the fire, keep skimming it, and add the above mentioned roots. Lastly remove a little from the fire, and let it stand for ten minutes. If served at once on taking it out of the boiling broth, it is liable to turn black. (From *E. Petzold's* Cookery-book.) See also the hints given in the article "How to Steam, Roast, Bake or Boil Meat," p. 289, as well as "Stoves, Heating and Cooking," and "Practical Cooking Utensils."

BEEFSTEAK. Cut away the fat and skin from a piece of under-cut of loin, make roundish pieces of it, about the thickness of a finger, rub both sides with some salt and a little ground pepper and strew some chopped onion over them. Melt butter in a frying pan or quick-roaster, get both sides a nice-brown, turning them several times. Make a gravy by putting butter and water into the pan afterwards. For patients, without the sauce. Treat veal-cutlets, game, etc., in the same fashion.

BEEFSTEAK, RAW (CHOPPED FINE) OR FRIED. Take loin of beef, cut off the fat and skin, chop it fine, add pepper, salt,

chopped onion and garnish it, according to taste, with a poached egg; fry in butter if not served raw, half beef and half pork is preferred in that case, and serve with salad, stewed fruit, boiled potatoes, etc.

ROASTBEEF. We will here describe the method of roasting employed in the South of Germany, but it may be tried elsewhere, being an excellent recipe.

Skin a slice of sirloin, take out all the gristle, fat and bones, rub it all over with salt and leave it for an hour; then lard it with bacon fat. Put two sliced onions and, according to taste, some parsley roots into a baking dish, put the meat in, add plenty of butter, half a cupful of water, or butter stock, baste frequently to keep it juicy. Turn it after an hour, and pour a glass of light wine, or instead some vinegar over it. When done (generally within two or three hours) take it out of the oven to prevent its losing its fine, juicy taste. Strain the gravy and add some broth and half a lemon, pour it over the meat, which is then baked a little longer. Then take the meat out and cut into slices. The addition of a few spoonfuls of cream to the gravy makes the whole particularly palatable. Serve with freshly fried potatoes, maccaroni, or cauliflower, boiled in salted water. (From *Emma Petzold's* Cookery-book.)

ROASTBEEF. ANOTHER METHOD. Choose a fine piece of the rump or buttock, wash, beat and lard it. Put it on the stand in a baking dish, with water, salt, butter, onions (according to taste), celery and parsley, etc., and steam, basting it frequently. Turn it after from thirty to forty-five minutes, add slices of lemon, bay-leaves, vinegar, also some ground pepper, and breadcrust to make the gravy thick. Bake the meat till light brown and tender; (time about two and a half to three hours) turning it several times. The patent quick roaster may be used in this case, see Index. It will do meat more quickly. Serve with French lettuce, cabbage and boiled potatoes.

SOUR ROASTBEEF. Take a piece of beef, wash and clean it, and let the water run from it. Put it in an earthenware pot, add juniper berries, bay-leaves and white wine-vinegar, or vinegar diluted with an equal part of water, till it covers the meat. Then cover the pot well with paper so as to exclude the flies, put a lid over it and keep in a cool place for from four to six days. When required for baking, take it out of the vinegar, wash it, put in a baking dish, add water or an equal part of water and vinegar, salt, onion, allspice, breadcrust, lemon and orange peel and bake it till done, turning and basting repeatedly; time, two and a half to three and a half hours. If too much gravy has boiled away, add water and vinegar, and, according to taste, a small piece of ginger-

bread. Before serving run the gravy through a sieve after having taken all the fat off. Milk dumplings, or stewed dry fruit, etc., are generally served with sour roastbeef, which is considered a delicacy in some parts of Germany. The meat is done more quickly in *Kuntze's* quick-roaster.

BOILED MUTTON. Wash the joint very carefully, scald it with hot water and put it in boiling water, adding salt, an onion, a few bay-leaves and a few pieces of carrot or other roots. Time, one and a half to two hours. Boiled mutton is generally served up with potatoes cut in slices and boiled with parsley, dumplings, Savoy beans, vegetables, French beans, turnips and various kinds of cabbage, onion sauce and pearl-barley. See also hints in the article "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING" and "PRACTICAL COOKING UTENSILS."

LEG OF MUTTON, COOKED LIKE VENISON. Skin the leg, beat it well, rub salt and pepper into it, put it into white wine-vinegar, or baste it with the same, and leave for about three days; then take it out, lard it well, add onions, whole pepper, bay-leaves, cloves, slices of lemon, some salt and vinegar, and bake it in an ordinary baking dish or quick-roaster till done; time, one and a half to two hours. It must be often basted and turned.

To make it more savory some sour cream or apples minced and fried in butter and a little gingerbread and sweet wine are added.

A saddle of mutton may be treated in exactly the same way.

ROAST MUTTON. Beat the meat on both sides, carefully remove all the tough skin; wash it, and put it with salt, onions, also if desired with some marjoram or garlic into an ordinary baking-dish on a stand or in a quick-roaster: add water, till it reaches the meat. Time, one and a half to two hours, during which time it must be constantly basted; after one hour's time it is turned and covered then or later with bread crumbs. Boiling water to be applied if the gravy evaporates too rapidly. Serve with boiled potatoes, dumplings, etc.

BOILED PORK is prepared in the same way as beef and mutton (see ibid.), except that more salt is added to fresh pork. Salt pork does not require any salt. Time, one to two hours. Serve with sauerkraut, pulse, millet, horse-raddish, potato dumplings, yeast dumplings, etc.

Pickled, smoked and boiled pork is not recommended to patients, because in those forms pork is not easily digestible owing to the fibres being firmer and the juices withdrawn. See also hints given in the article under "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT" (p. 289),

also "STOVES, HEATING AND COOKING" and "PRACTICAL COOKING UTENSILS."

PORK CUTLETS. Prepare them in the same way as veal cutlets but do not beat them so much, and only till they are flat. Serve with cabbage, lettuce, boiled potatoes or various vegetables, or with horse-raddish, dumplings, etc.

ROAST PORK. Take the leg, loin or back. Wash it, put it into an ordinary baking dish or the quick-roaster, with the rind on the stand; add plenty of water, some salt, an onion, etc. After a full hour, turn it, making at the same time long cuts, lengthwise and crosswise, in the rind, about an inch apart. Time, about one and a half to two hours. Skim off the fat during and after roasting. If the gravy is much reduced, add water.

Bake it a nice light-brown by putting on it breadcrumbs mixed with a little clarified sugar an hour before it is done.

Serve with boiled potatoes and the various dishes of stewed fruit or salads, or with vegetables, dumplings, etc.

BOILED VEAL. Wash it clean, add salt and put it on the fire with boiling water (it keeps white better than in cold water), turn it repeatedly in the pot to prevent it sticking to the sides. Before it boils skim it well, add various roots, according to taste. Time, an hour to an hour and a half. Serve with groats, rice or vermicelli, and with a sweet, savory or other sauce. Savory sauce is made with fried bread and marjoram boiled a short time in a little veal broth. See also "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," (p. 289.) "STOVES, HEATING AND COOKING" and "PRACTICAL COOKING UTENSILS."

HASHED VEAL WITH WHITE SAUCE, (FRICASSEE OF VEAL). This dish is called preserved veal in the south of Germany. Take the breast, particularly the thin part because of the gristle in it; boil it about forty-five minutes with various roots, which must be boiled separately beforehand, till three parts done. The meat when done is taken out of the broth and put into cold water; otherwise it will not retain its white color. It is then cut into pieces if desired. Make the following sauce for it: for six to eight people (requiring about two pounds of meat), about five ounces of butter are put in a saucepan; when hot add salt, some small onions, with cloves stuck in them, parsley, bay-leaf and mace; stir together and stew it, three spoonfuls of flour are also gradually added, stirring it all the time, and a few finely chopped anchovies may be added to impart an additional flavor. The hot broth in which the meat has cooked is gradually added, also a glass of wine or the juice

of a lemon or a little vinegar. When the sauce has been removed from the fire, whisk one or two eggs in and boil it for a minute longer. Instead of the eggs, half a pint of cream may be taken, the latter is preferable as it does not curdle so easily. The sauce is strained and the meat is put in the sauce and left near the fire for a short time afterwards. Boiled potatoes, etc., are served with it. (From *Emma Petzold's* Cookery-book.)

ROAST VEAL. Brest or leg is generally chosen, or the loin with the kidneys may be taken. Wash, skin and beat it well, put it into a baking dish (or quick-roaster), add melted butter. After baking at a moderate rate for thirty minutes, add hot water, onion, various roots and afterwards breadcrust. When brown on one side, turn it. Put breadcrumbs on it, baste frequently. Serve with boiled potatoes, apple-sauce, fresh lettuce and various compotes and salads, as also with green peas, etc.

STUFFED BREAST OF VEAL. Wash the breast clean and cut open its thinnest part. Make a stuffing of soaked bread, eggs and parsley, steamed in butter, or of pared apples cut into small pieces and fried in butter, adding bread-crumbs, eggs, and, if desired, also cinnamon, sugar and currants. The breast of veal is fried in butter till light brown but it must be constantly basted.

VEAL CUTLETS. Eight to nine cutlets can be made of three pounds of meat, according to the size of the calf. Cut out the backbone and the outer skin, and then cut the cutlets two ribs thick. One of the two bones of one is cut off, the other that remains on the meat being scraped clean with a knife. Put the cutlet on the chopping board, beat it with the flat side of the chopper till flat; give it an oval shape with the knife, put salt and ground pepper on it, dip it into egg on a plate and roll in bread crumbs; then put the cutlets into a frying pan with melted butter, fry both sides a nice light brown and serve with vegetables or a brown sauce.

Note.—The cutlets only remain juicy if fried over a quick-fire to prevent the escape of the juice. Of the trimmings, of which there are plenty, as all bones and sinews must be cut off, a brown sauce is made by stewing them in a sauce with roots, some lean ham, bits of bacon and spice, then boiling it down with some water and adding it to the gravy of the cutlets when the latter are served as a principal dish with salad. (From *Katharina Siegl's* Cookery-book.)

Diet, Mixed. (Game.)

ROAST HARE. Skin the hare, cut off fore-legs, breast and neck with head (these cut off parts make a dish by themselves); wash well, re-

move all the fine skin, and lard all over with strips of bacon fat, put into a baking dish with half a pound of butter, let it bake in the oven for an hour, basting it frequently, add half a pint of sour cream ten minutes before taking it out. The gravy is served separately in a sauce-boat. Instead of cream you may put breadcrumbs over it; baste it several times; strain the gravy and pour it over the hare. (From ***Katharina Siegl's*** Cookery-book.)

Serve with dumplings, boiled potatoes, cabbage, lettuce, sauerkraut, spinach, boiled red cabbage, celery, etc.

STEWED HARE OR VENISON. Cut it up into as many pieces as there are people for dinner, put in a large saucepan with a good piece of butter, a sliced lemon, two to three spoonfuls of sugar, allspice, juniper-berries, and a little boiling water; bake with a slow fire, and baste frequently. Before it is done add a tea-cup full of wine and half the quantity of white wine-vinegar, let it stand by the fire a little longer, and strain the sauce. Serve with boiled potatoes, potato chips, dumplings, stewed red cabbage; use stewed or preserved cherries for a side-dish.

(From *Emma Petzold's* Cookery-book.)

Diet, Mixed. (Poultry.)

GOOSE, HOW TO KILL AND ROAST A. If the goose is to be killed so as to save the blood to dress the giblets with, bend the neck and make a cut in the throat; let out all the blood, which should be caught in a basin with vinegar and whisked while it is flowing. (In many parts the head is at once cut off with a chopper so as not to torture the bird so much, certainly the best and most humane way.) Pluck the goose as quickly as possible before it gets cold. After plucking, singe it. Then scald it with boiling water and wash in cold and pick it clean. Cut off wings and feet at the joints. Then leave it until it is thoroughly cold and the fat hardened. It is generally left for from twelve to sixteen hours. When it is properly drawn and the fat taken away from the intestines, windpipe and gullet are taken out, the stomach cut off, the thick skin pulled off, the prime fat along the sides and especially the fat of the intestines put into cold water. It is then washed clean, and the liver put by separately after the gall has been carefully cut out, so that it does not break and make everything bitter. The wings, feet, neck and stomach are kept for goose-giblets, and the inside of the goose is thoroughly cleansed by washing or scalding. Chop the neck into as many pieces as required, cut off the head and take out the eyes. Then scald the inside of the goose, rub half a spoonful of salt into it and put some mugwort and good apples into it. Strew a spoonful of salt over the

outside. Put the stand into the baking dish and the goose on it. With a well-fitting dish-cover, it will bake even when a good deal of water is added. When it has become tender by frequent basting, raise the cover and let it brown nicely. The fat may be skimmed off, and some of it used for basting and browning, if there is not sufficient in the dish. Time of baking, two to two and a half hours. In July and August goslings are put on with a little piece of butter and only a pint of water, as they have but little fat.

Serve with cabbage, red cabbage, sauerkraut, small turnips, fried potatoes, apple-sauce, cranberries, etc.

When buying geese or ducks, be careful to select young birds. Old ones have dark feet and beaks, young ones light yellow ones. Besides there is a blue or yellow ring round the pupil of the eye in old birds, whereas in young ones the ring is white. (From *Emma Petzold's* Cookery-book.)

ROAST CHICKEN. Kill, pluck, draw, wash and rub salt into them; make a stuffing of parsley and a little fresh butter; then put the chicken into a baking dish or a quick roaster, etc., and bake a light brown in a quick oven. Baste continuously. Serve with any kind of stewed fruit, salads, etc. Asparagus with melted butter, peas, cauliflower, mushrooms, etc., may be added.

ROAST DUCK. Prepare and bake in the same way as a goose, but in most cases butter will have to be added. The time for young ducks is generally one hour, for old ones two hours.

ROAST PIGEONS. Pluck, draw and clean, take out stomach and liver, chop them fine, put butter in a pan; whisk a few eggs, and put them into the hot butter, and stir till they begin to set. Then add the chopped liver and stomach, a little ginger, pepper, nutmeg, and salt, stir together, stuff the pigeons with it, and bake them well. Another kind of stuffing is made of grated breadcrumbs, eggs, butter, currants, ground mace, minced lemon-peel, almonds scalded and finely chopped, and salt. (From *Katharina Siegl's* Cookery-book.) Bake them a nice light brown, baste them often and serve with the same accessories as chicken.

Diet, Mixed. (Fish, etc.)

DUTCH PICKLED HERRINGS. Take soft roed herrings by preference, soak them for from twenty to twenty-four hours in water, which should be renewed frequently, then scale them, take out the soft roe, mince thoroughly with a little onion and beat in equal parts of water and vinegar. Put them in bottles or jars and pour the liquid over them

together with pepper-corns, bay-leaves, cloves, spice, sliced onions and a few slices of lemon. The vinegar must cover them entirely.

FRIED HERRINGS. Put them in water or milk and leave them for some hours, then clean them, taking out bones and fins, take a tablespoonful of milk, two spoonfuls of flour, and whisk one egg into this. Put some butter into a frying pan, put the herrings into the butter and fry a light brown.

TO BOIL CARP, TENCH AND TROUT. Open the belly, pour boiling salted wine-vinegar over them, so as to make them a nice blue color; many omit this. Put water, pepper, allspice, lemon-peel, bay-leaf, whole ginger and wine-vinegar (one spoonful of salt to a quart of water) into a pot or fish-kettle, put in the fish as soon as the water begins to boil, and boil them until they are done. Serve carp with melted butter, wine-sauce and boiled potatoes, also if desired with red cabbage or with melted butter and grated horse-radish, mixed with some vinegar and sugar; or cold, with oil and vinegar, etc. Serve tench in a similar way.

Serve trout whole, putting them neatly on a dish, garnish with parsley and serve fresh butter and small potatoes with them. Serve cold with oil and vinegar and slices of lemon. Salmon may be served with asparagus, when in season.

Boil eels in a similar way, but they require boiling longer than any other fish.

If not to be served at once, put paper over them to preserve the blue color and flavor.

TO BOIL CRAY-FISH. To about thirty good-sized crayfish, washed clean, use about a quart of water, salt, some bay-leaves and an onion; when the water boils put in the cray-fish and boil them for three or four minutes, drain the water off and let them stand covered till served. Meanwhile make the following sauce: put a piece of butter into a saucepan and when it rises add some finely chopped parsley and some dill, put the fish upright on a dish with parsley round them, and send them to table with the sauce separately. (From *Katharina Siegl's* Cookery-book.)

TO COOK SALT-WATER FISH. Haddock, cod, turbot, etc., should be well washed and either whole or in pieces put into cold salt water for some hours; then put into boiling water, to which onion, previously boiled in salt water, salt, pepper-corns, bay-leaf, etc., have been added, and boil for nearly eight minutes. Pour browned butter over them and serve with boiled potatoes.

Diet, Mixed. (Dishes made of Potatoes.)

BOILED POTATOES. Wash and pare potatoes, as much as possible of the same size, add salt, and, according to taste, caraway seed, put them in boiling water and boil them quickly till soft. Strain them and let them steam a short time. They are best done in the steamer or in *Kuntze's* quick-roaster.

Serve with any roast meat, cutlets, beefsteaks, fish, game, poultry, especially with goose and warm red cabbage as salad or other salads, stewed fruit, etc.

FRIED POTATOES. Cut cold boiled potatoes which have been left over into pieces, put them into a frying pan or saucepan, add salt, butter or fat, according to taste, also onions; fry in butter, and keep stirring them till well cooked.

MASHED POTATOES. Pare the potatoes raw, cut them into small pieces, boil them in water until they are soft, strain, wash and mash them, adding sufficient salt and boiling water.

Serve with bacon or butter, onions fried a light brown, also with cream or good milk, and with fried sausages, pork cutlets, Dutch herring, etc.

MASHED POTATOES WITH MILK. Wash, pare and cut raw potatoes into small pieces, and boil them till they are soft but without any salt; drain, mash, salt and add milk, some pepper and melted butter.

POTATOES BOILED IN THEIR SKINS. Put medium-sized well-washed potatoes in a saucepan with cold water, and well covered; when they begin to boil, pour a spoonful of cold water on them occasionally (to prevent their breaking too soon). When they are done, strain them, put the lid on and steam for a few minutes. Another way is to strain them dry when they are half done, put salt on them, cover them well and bake them at a moderate fire until they are well done and a crust forms on them. Steaming potatoes in a steamer, or in *Kuntze's* quick-roaster is preferable to boiling them in an ordinary saucepan, because they do not come into direct contact with the water which must not reach the bottom of the steamer: they are, therefore, cooked by the steam, and, consequently, are more mealy. (See "STOVES, HEATING AND COOKING" and "POTATOES.")

Potatoes that have just been dug up have the best taste. Many people add salt and caraway-seeds to improve the flavor.

Old potatoes should be pared very thick, to make them mealy and more palatable.

They are served with fresh butter, curds, Dutch herring, etc.

POTATO-CHIPS WITH BEEF OR MUTTON. Pare raw potatoes, cut them into small pieces, wash and boil them slowly in gravy, or steam them, till soft, adding some caraway-seed. Take according to taste chopped parsley, onions or celery; pour boiling water over them several times before putting them into the gravy. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING," and "PRACTICAL COOKING UTENSILS."

POTATO DUMPLINGS. Cold, boiled potatoes are grated, and salt added to them; make into balls and bake in a greased tin, till one side has a nice brown crust. A little flower may be mixed with the potatoes and then baked till both sides are of a golden yellow.

POTATO-SALAD. Wash and boil potatoes, cut them in slices, keeping them warm, mix them in a dish with wine-vinegar, salad oil, slices of onion, pepper and salt to taste, chives, a few capers, chopped parsley, etc., and serve, when all has well soaked in, either alone or with sausage, roast meat, Dutch herring, etc., or with bacon.

Some people like potato-salad with the potatoes mashed instead of cut, in which case water may also be mixed with the above.

POTATOES, SOUR. Take boiled potatoes, cut them into pieces and let them boil up in the following sauce: smoothly cut, fried onions, browned flour, a few slices of pickled gherkins and some pepper, allspice, a few bay-leaves, boiling water or broth; some people add a little gingerbread.

This dish is served alone or with fried or smoked sausage, roast meat, etc.

Diet, Mixed. (Meat, Herbs and Legumes.)

ASPARAGUS. Take fine, large asparagus, clean and tie into bundles of ten or twelve sticks and boil or steam in salted water till soft. Then add some more cold water but very gently, so as to prevent the heads from separating from the stalks. Pour off some of the boiling water and add some cold, put on a dish, having previously made the following sauce: Put about an ounce of butter into a saucepan and whisk four eggs into it till it is frothy, then add gradually half a large spoonful of flour and after that a good pint of the boiling water in which the asparagus was boiled, and let this sauce gently simmer and be constantly stirred. When done, add the juice of half a lemon, and pour over the asparagus. This sauce must not be too thin, but of a frothy consistency.

Asparagus may, however, be served simply with butter fried brown, melted butter and toasted bread, according to taste. (From *Katharina Siegl's* Cookery-book.) For another way to cook asparagus, see "VEGETABLES, YOUNG," in Index.

BARLEY-GROATS AND DAMSONS, see Index.

BEANS, white, with or without meat. Treated in the same way as lentils (see the same).

CARROTS WITH BEEF. See "STOVES, HEATING AND COOKING." Boil carrots in the same way as turnips, or, better still, steam them in a little water instead of broth, because they lose some of their sweetness in the latter, take browned flour of them, but not rolls or bread.

Carrots may also be served with roast ribs of veal, stewed liver, omelette, etc.

CAULIFLOWER WITH MEAT. See "STOVES, HEATING AND COOKING." Trim the cauliflowers, cut the heads into quarters and boil till soft with a little salted boiling water, or steam them, which is even better. Meanwhile melt some butter in a pan, let two spoonfuls of flour rise in it and add a little stock. According to taste add some sour cream, mace and one or two eggs; let all boil up and then arrange the cauliflowers nicely in a dish, pour the sauce over them, and serve with beef, ribs of veal, young chicken, etc. For another way, see "VEGETABLES WITH MILK SAUCE" in Index.

CUT VERMICELLI IN MILK. In lieu of broth take fresh milk, boiled up with a piece of butter. Put the vermicelli in, and boil it down. Proceed as above. In serving, put on a dish and pour melted butter over it. (From *Emma Petzold's* Cookery-book.)

EGG-VERMICELLI (home made) with or without meat. Take one egg to each person. Make a hollow in the flower, and put the eggs in it. Take enough flower to make a stiff dough. Roll it out as thin as possible on a pasteboard with the rolling-pin as with cake. Roll the flakes together, having put some flour between and cut into very thin strips. Hang up the vermicelli to dry or put it in an oven. It is best to make the vermicelli the day before it is required; the next day take some broth, boil it up and sprinkle the vermicelli in very loosely. While boiling they have to be lifted up frequently and carefully with a spoon so as not to get lumpy. Time, fifteen minutes. Add salt and mace to taste and serve with beef.

GREEN PEAS with meat. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING" and "PRACTICAL COOKING UTENSILS." When the peas are shelled put them on with a little cold water and plenty of fresh butter, and steam them for fifteen minutes. Sprinkle a little flour over the peas, and steam them a little longer or let them simmer. When boiled in this way with the addition of some parsley, they have a more agreeable taste than when

boiled in broth. Many prefer to boil them with carrots, cut into small strips. If the peas are young, the carrots are boiled first and then the peas added. It is on the whole better to boil pears, carrots and turnips separately and to mix them afterwards. Serve with veal, all kinds of poultry, baked calves' feet, roast ribs of veal or dried cod. See "VEGETABLES WITH MILK SAUCE" in Index. (From *Emma Petzold's* Cookery-book.)

HORSE-RADISH SAUCE with beef or salt-pork. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING." Wash the horse-radish, scrape and then grate it, boil up with breadcrumbs (many people take sliced roll, if it is to serve as a vegetable), and a little salt in broth. Do not boil it too long as it loses its pungency; an egg, pounded sweet almonds or some nutmeg may be added, according to taste. Horse-radish is a favorite condiment with dumplings.

KOHLRABI WITH OR WITHOUT MEAT. See "STOVES, HEATING AND COOKING." Scrape clean and cut into thin round slices, including the leaves near the heart, steam first in a little salt water; add broth and boil till soft. Add flour fried in butter, and boil up once more.

Serve with boiled beef or mutton, fried sausages, etc.

KOHLRABI WITHOUT MEAT, see Index under the heading "VEGETABLES WITH MILK SAUCE."

LENTILS WITH MEAT. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING." Pick the lentils clean, wash them and put them into cold water with a little salt and boil them until they are soft. Then strain them and add broth, browned flour, some warm vinegar, if they are to be sour, and boil all together for a short time. It is well to soak the lentils over night. They are generally served with fresh, pickled or smoked pork, boiled ham, or boiled or warmed black pudding or fried pork sausages, etc. A more simple dish is lentils with potatoes and bacon.

MUSHROOMS OF ALL KINDS AS VEGETABLES. See "STOVES, HEATING AND COOKING." Clean and wash fresh-gathered mushrooms, of which there are a great many edible varieties, cut them into small pieces, boil or steam them in salted water for fifteen minutes, strain them, cut them into small cubes, and stew for a while with plenty of butter, some salt, pepper, onion and parsley till all the liquid has evaporated. Sprinkle some flour over them, and let them simmer, adding the water in which they were first boiled. Serve with roast ribs of pork, roast beef or veal. (From *Emma Petzold's* Cookery-book.)

Mushrooms may be cooked by simply boiling or steaming them with water, salt and pepper, adding browned flour and parsley, and boiling them up once more.

MUSHROOMS, FRIED. Clean and wash them well, cut them up small, make some butter hot in a saucepan or pan, throw in your mushrooms, add chopped parsley, salt, pepper and fry well.

Mushrooms being very nutritious, it is not advisable to make a large meal of them, especially if meat is eaten in addition. They lose their flavor if warmed up.

PARSLEY SAUCE WITH BEEF OR VEAL. See "How to Steam, Roast, Bake or Boil Meat." Pick, wash and chop parsley; boil in broth and flour, or grated bread, fry the bread in butter, add some salt to the broth, and boil till rather thick. (Some people take sliced roll; do not fry if the sauce is to serve as a vegetable; it can also be served with nutmeg.)

PARSNIPS WITH BEEF OR MUTTON. See "Stoves, Heating and Cooking." Scrape the parsnips and put them at once into fresh water, wash them clean, cut into longish strips, boil till they are soft in broth, add slices of roll or browned flour; add parsley if desired, boil up and serve. See "Vegetables, Young" in Index.

PEARL-BARLEY with or without meat. All slime should be washed out of the barley, let it boil up, add some broth, salt to taste, perhaps, too, a little butter; boil it for about an hour, stirring frequently; large barley groats must be boiled for at least two hours.

It is suitable for beef, mutton, fresh or pickled pork and may also be served with onion, fried in butter.

PEAS with or without meat. Treated and served the same as lentils, but without vinegar. In the absence of broth, add browned butter or bacon.

RED (PICKLED) CABBAGE, STEAMED (STEWED) CABBAGE WITH MEAT. See "How to Steam, Roast, Bake or Boil Meat," also "Stoves, Heating and Cooking." It is a favorite custom to add a few heads of white cabbage in addition to the red. Cut up the cabbage finely and put it on the fire with a few spoonfuls of water and a little salt, and let it steam for half an hour with the lid on, stirring it at times. When it begins to get soft, put in hot dripping lard or fried bacon; when nearly done add the necessary wine-vinegar and throw in, if palatable, half a tablespoonful of flour. Another way is to put on the cabbage, with some water, vinegar, or, if preferred, a glass of wine, add salt, pepper and fried bacon and steam till it is soft, frequently

stirring it. A little sugar before serving gives it a pleasant taste. It may be served with fried sausages, pork-cutlets, roast goose, duck or hare, also with carp. All kinds of cabbage should be steamed. It is served with beef, fried sausages, ham, etc. (From *Emma Petzold's* Cookery-book.)

RED CABBAGE WARM WITH ROAST MEAT. See "STOVES, HEATING AND COOKING," and "PRACTICAL COOKING UTENSILS." Beat on a board till it is soft; some take it into their hands at once and squeeze it, others again do not squeeze or beat it at all. After the liquid has been squeezed out, put into a saucepan with some butter or fat, steam it for from about half an hour to an hour, stir or shake it up repeatedly to prevent it from burning at the bottom.

Add a few grapes or plums if preferred, cut oblong, and steam for a short time together. Some then add fried bacon and vinegar before serving, others add a little more water and the same quantity of vinegar, a spoonful of flour, two yolks of eggs whisked together and let the whole simmer a little while longer.

Warm red cabbage with boiled potatoes may be served with almost any kind of roast meat or cutlets, fish (especially carp) or fried sausages, etc.

RICE, BOILED.
RICE MEAL.
RICE-MILK.
RICE-PUDDING.
RICE-WATER.
RICE WITH APPLES OR RAISINS.
} see Index.

RICE OR PEARL BARLEY WITH BEEF. Boil the meat separately from the rice or barley. When the latter is nearly boiled add it, together with some nutmeg, celery, etc., to the meat; cook till quite done and serve. Raisins may be added to the rice after it has boiled for an hour. But if the meat and the vegetable are to be served apart, cook separately, both rice and pearl-barley being cooked with the proper addition of broth; serve the meat and vegetables on different dishes. The same process may be adopted when lentils or beans are boiled to be served with the beef. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING." (From *Katharina Siegl's* Cookery-book.)

RICE WITH MEAT (supplementing the last recipe). Stir the rice in boiling water, pour more boiling water over it, and let it boil and swell. Add some soup-stock gradually and boil till soft. Some like celery

with it, which has to be thoroughly boiled; others again like raisins, which need only little boiling, or nutmeg, etc. Serve with beef, veal, old poultry, etc.

SAUERKRAUT. Boil in water for from two to three hours. If it is very sour, pour boiling water over it several times. Afterwards add broth to it, and, when the kraut is perfectly done, a spoonful of potato-meal and let it simmer. In the west of Germany, especially in the Rhenish provinces, not only is the water squeezed out of the sauerkraut but it is even soaked before boiling. After being squeezed, boiling water is poured on it and it is allowed to soak for some time, about three-quarters of an hour. When it has soaked, it is boiled with a piece of bacon and a few potatoes (whole or grated), which makes it really palatable.

Sauerkraut is everywhere served with fresh or pickled pork, smoked beef, fried or smoked sausage; among the lower classes with pease only. (From *Emma Petzold's* Cookery-book.)

SPINACH with or without meat. See "STOVES, HEATING AND COOKING," and "PRACTICAL COOKING UTENSILS." Cut the spinach so as to separate all the leaves, by taking hold of it and cutting it open under the top. Wash it very clean and steam till it is soft in salt water. Then put it into a strainer, squeeze the water out, chop it fine on a clean board, put it into a saucepan, add butter, some of the drained liquid in which it was boiled and some stock, but do not make it too watery, and salt it to taste. Boil on a gentle fire and add afterwards one or more spoonfuls of flour previously stirred in water, according to the quantity of the spinach, or, instead of flour, breadcrumbs, or let the flour just rise in melted butter in a pan, and add, if palatable, some finely chopped chives and boil with it. If some cream of the day before is available, stir a little flour in it and add to the spinach. To make this dish look appetizing, cut a roll in slices, making notches in the crust, and fry in butter till light brown, put alternately one of these fried slices and a hard boiled egg round the edge of the dish and then sprinkle bread-crumbs over the spinach. Some people put long pieces of fried bread crosswise over the middle of the dish. If the spinach is to be served with meat, chop it very fine, mix it with some browned flour and a little salt; boil it up in broth and put fried slices of bread over it. Serve with ribs of beef, pork or veal, roast hare, ham, fried sausages, etc. (From *Katharina Siegl's* Cookery-book.)

WHITE CABBAGE WITH MEAT. See "HOW TO STEAM, ROAST, BAKE OR BOIL MEAT," also "STOVES, HEATING AND COOKING." Take away the outer leaves, cut the cabbage into quarters, steam until soft in a little salt water, then add broth and boil in it. Meanwhile

make a sauce of butter and flour in a frying pan, allow it to boil up only, add an onion, put it then into the broth, add salt, pepper and a little caraway seed, and boil up together. White cabbage must not boil longer than a full hour, because it becomes pulpy if boiled longer. Scatter some pepper over it, and serve with beef, mutton, goose, pork, etc. Treat savoy in the same way but adding chopped onions instead of caraway-seed. Suitable with savoy are roast meats of every kind, ham, smoked beef, ox-tongue, or fried sausages. (From *Emma Petzold's* Cookery-book.)

Diet, Mixed. (Dumplings.)

APPLE-DUMPLINGS, see Index.

BARM DUMPLINGS with or without meat. See "STOVES, HEATING AND COOKING," and "PRACTICAL COOKING UTENSILS." Take a cupful of yeast or barm, a quartern of flour, a cupful of lukewarm milk, half a pound of melted butter, some salt and eggs; stir the whole well, see that the dough is stiff enough to make dumplings of it with the hands, and if it is not, add some flour; if too stiff, add some milk and let it stand a while; put flour on the paste-board and put it in a warm place, laying the dumplings, which should be about the size of duck's eggs, on it, leave them there ten minutes, and then put them into boiling water in a large saucepan. Turn them after boiling seven minutes, boil them again for the same length of time and try with a wooden skewer whether they are done. If the dough sticks to the wood, boil them longer; if not, take them out quickly. With a skimmer cut them open at one end and pour fried butter over them. Cutting them open prevents them from getting sad; butter and eggs may be both left out, but it naturally makes them less palatable.

Serve with stewed apples, plums, etc., with fried butter; also with different roast meats. (From *Katharina Siegl's* Cookery-book.)

FLOUR DUMPLINGS. Fry some bacon and pieces of bread, and if desired, an onion. Make a paste of a pound of flour and half a pint of warm milk, two eggs and salt; add the fried bread and as much flour as is necessary to make a nice consistent paste, but not too stiff. Make dumplings of it and boil them till soft in salted water about half an hour; if no dough sticks to a fork when inserted into the dumplings, they are done. Serve with boiled or stewed fruit or fried butter, etc.

FLOUR DUMPLINGS FOR SOUPS, see INDEX.

GROAT DUMPLINGS FOR SOUP, see Index.

HAM DUMPLINGS. Whisk six eggs and a few spoonfuls of potato-meal into a pint of milk. Soak in it a small quantity of sliced

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bread, about as much as a roll; next fry double the quantity of bread cut into cubes in butter, take about half a pound of finely chopped ham, and as much flour as will make a firm paste of the whole, leave it about twenty minutes for the ingredients to combine well, make dumplings of it and boil in the usual way.

Serve with stewed fruit, sauerkraut, etc., or use in soup.

LIGHT DUMPLINGS FOR SOUP, see Index.

MEAT DUMPLINGS FOR SOUP, see Index.

POTATO-DUMPLINGS with or without meat. See "How to Steam, Roast, Bake or Boil Meat," "Stoves, Heating and Cooking," and "Practical Cooking Utensils." Take cold, boiled potatoes and rub them through a grater. Take a sufficient quantity of flour, wheaten or potato flour, a spoonful of salt (some people add eggs or slices of onions fried in butter), a little nutmeg, etc., mix the flour and grated potatoes, knead well and make dumplings, putting into the inside of each some small cubes of bread fried in butter. Then throw them into boiling salted water and boil till they are done (about fifteen minutes); serve with boiled or stewed fruit, sauerkraut or horse-radish, with roast mutton, roast pork, roast beef or veal, etc. To see when they are done enough, proceed as indicated under "Raw Potato or Green Dumplings." For another recipe, see Index.

RAW POTATO OR GREEN DUMPLINGS with or without meat. First consult "How to Steam, Roast, Bake or Boil Meat," on page 289; "Stoves, Heating and Cooking," and "Practical Cooking Utensils." Take the largest potatoes you can get; wash, pare and grate them into a dish half full of cold water. After grating, pour off the water, and with fresh water wash all the grated potato deposited in the strainer in a convenient sized basin. Press all the water out of the potatoes by straining through a linen cloth or bag, then stir about half a pound of ground grits into boiling milk, so as to make a stiff paste. Scald the grated potatoes with this boiling hot paste, adding salt and bread cut in squares and fried in butter, and from one to two spoonfuls of wheaten flour. To make them particularly nice, add a couple of eggs. Knead the whole into a light dough, and make dumplings of it. Then proceed in the following manner: Put the paste and a basin of cold water near a hot oven in which there should be one or two pots of boiling water. Dip both hands into the cold water and take as much of the paste as is needed to make a dumpling, inserting into it pieces of bread fried in butter, unless these have been mixed with the dough before. The fried bread causes the dumplings to hold together better, and improves their taste. Each is put into the boiling water as it is made; boil for

ten or fifteen minutes and then break one open, to see if sufficiently boiled. Serve with duck, leg of mutton, stewed or roast meat, roast goose or pork. (From *Emma Petzold's* Cookery-book.)

Diet, Mixed. (Spoon-meat, etc.)

BUCK-WHEAT PORRIDGE. Put the buck-wheat into boiling water, to which some salt and butter have been previously added, stir it well and frequently, and boil gently for about half an hour at a slow fire until it is stiff. Serve with fried butter, and sprinkle sugar and cinnamon on it.

CORN-FLOUR. Stir from six to eight spoonfuls of flour in two quarts of boiling milk, adding it gradually to prevent its getting lumpy. Leave the saucepan on the stove for a few minutes, without letting it boil again or the corn-flour will be slimy. Serve with butter fried brown.

FLOUR IN WATER. Stir from six to eight spoonfuls of flour into two quarts of boiling water, add salt, and serve with fried onions and bacon, or onion fried in butter, or with Dutch herring, or fried sausages.

MILLET PUDDING. About a pint of millet is required for every four persons. Stir it in warm water till clear and drain it through a strainer. Boil three pints of milk, add the millet, and let it gradually soak some distance from the fire. Should it get too thick, add some warm milk gradually. Take great care that the milk or millet does not burn, the saucepan should, therefore, be moved frequently and the millet continually stirred with a wooden spoon. Serve with butter fried brown over it. (From *Katharina Siegl's* Cookery-book.)

PUMPKIN-SQUASH. Cut the pumpkin into quarters, pare it very carefully, cut out the seeds and fibres, and boil in water till soft, then strain off the water and add boiling milk after having boiled it a short time, stir it till all is one even mass, whisk too eggs and sprinkle a very little flour into it. Shortly before serving, stir some fried bread-crumbs into it and add a little mace. (From *Katharina Siegl's* Cookery-book.)

Diet, Mixed. (Various Dishes.)

APPLE-PUDDING. Pare eight or ten good baking apples, cut them into slices, and fry gently in butter with about half a pound of currants and a quarter of a pound of sugar, but do not let the apples go to pieces. After that whip a quarter of a pound of butter with eight yolks of eggs into a cream, add a quarter of a pound of sifted sugar, some lemon-peel and finely cut orange-peel, a quarter of a pound of crushed sweet biscuits or maccaroni or bread-crumbs, beat the white of the eggs into a froth, and add it very gently to the batter. Then grease a

mould or basin, put alternate layers of batter and slices of apple till the mould is three parts full. Put into a hot oven and bake for half an hour and serve without sauce, but sprinkle sugar and cinnamon over it. (From *Katharina Siegl's* Cookery-book.)

APPLE-TART.
BREAD ROLY-POLY.
DOUGH NUTS.
FRUIT-BREAD.
FRUIT-CAKE.
} see Index.

GERMAN CHEESE-CAKES. To every pound of flour, take one pint of milk, one cup of yeast, three eggs, five ounces of butter, five ounces of currants and four ounces of sugar, half a pound of grated double Gloucester cheese with some salt and nutmeg. Make a paste of these ingredients, let it rise for two hours, cut off round pieces with a tumbler and fry them in hot butter; they should not be put in until the butter begins to rise.

GRAHAM-PUFFS.
MACCARONI.
MAIZE-CAKE.
OATMEAL-CAKE.
OMELETTE.
POLENTA.
PUMPKIN-PIE.
RED GROATS.
} see Index.

POOR KNIGHTS' PUDDING. Cut white bread or roll into thick round slices (rusks are still better), soak them in milk, but not long enough to let them fall to pieces, whisk a few eggs with a spoonful of milk or cream, dip the slices into this, sprinkle bread-crumbs, grated Parmesan or Dutch cheese over them and fry in butter.

This preparation is used for garnishing vegetables; but if it is to be eaten as a separate dish put flour, sugar and cinnamon over the slices instead of cheese; fry and put sugar on them again.

Another way is to beat up two or three eggs (according to the quantity of bread used) with a few spoonfuls of milk, some flour and two spoonfuls of good yeast with sugar and cinnamon; make a paste of this mixture, but not too thin; let it rise a little, roll the bread in it and bake. Pike and smelt may be baked in the same way, but they should be garnished with parsley. The saucepan must be shaken occasionally to

prevent the fish from burning or turning black and to preserve an even temperature. (From *Katharina Siegl's* Cookery-book.) See also "Poor Knight's Pudding" in Index.

RYE BREAD, HOW TO BAKE. Put the flour in a baking trough near the hearth or stove in a warm room over night. Divide it in the middle, take a penny-worth of yeast or barm for fourteen quarts of rye-flour and about three quarts of warm water, and leaven half the flour. The water must be just hot enough so that a finger can be held in it without being scalded. In leavening, the yeast must be very evenly distributed throughout, so that the whole is one uniform paste. A covering is put over the trough, and a baking-cloth over that. Next morning the other half of the flour is kneaded into the leavened dough, two quarts more of warm water added, the whole then kneaded well together. Be careful not to use too much water, and always have flour enough at hand to give the dough its proper consistency. Then let is stand by the warm stove or hearth for an hour or two, and send it to the bake-house, where it is again thoroughly kneaded and made into loaves and well baked in the oven. (From *Katharina Siegl's* Cookery-book.)

RUSKS.
TUTTI-FRUTTI.
VARIOUS PUDDINGS.
WHOLE-MEAL BREAD. } see Index.

Diet, Mixed. (Sauces.)

BROWN SAUCE. Grate some bread-crusts, pass through a sieve, add a large spoonful of flour, and fry brown in butter or fat, add broth and boil up once more. After that add some vinegar, or wine in preference, the juice of a lemon, some sugar, and let it simmer gently. Spice it with pounded cloves, and, if desired, with cinnamon; serve this sauce, which is very spicy, with roast meat of all kinds, game and venison.

MILK- OR CREAM SAUCE. Boil some lemon-peel, almonds, cin namon and sugar in a pint and a half of good milk or cream; then whisk two eggs and a little potato-meal and some salt in half a cup of cream, Add this to the above, boil it for a short time, and keep stirring it. Serve with puddings either hot or cold.

MUSTARD-SAUCE. Brown two ounces of flour in an ounce of fat or butter, add an ounce of sugar and a large spoonful of good wine vinegar, dilute it, when the flour is well browned, with broth or water, add salt and nearly three ounces of French mustard and boil the whole for some time longer. Instead of the browned flour, a little ginger-bread may be

used, but some fried butter must not be omitted. Many cooks also add raisins and currants.

Diet, Mixed. (Salads and Compotes.)

CUCUMBER-SALAD. Pare the cucumbers, cut into very thin slices with a machine or knife, mix salt with them, and leave for half an hour. The water of the cucumbers is then thrown away (some squeeze them out with the hand, mix wine-vinegar, salad oil and finely ground pepper with it, and serve.

FRENCH LETTUCE. Pick the lettuce, taking off the outer leaves, wash clean and mix in a bowl with a little vinegar, plenty of salad oil, a little salt; if the lettuces are small, cut chives according to taste or stalks of onions.

STEWED FRUIT. Boil apples, pears, cherries, plums, apricots, cranberries, raspberries, strawberries, black berries, bilberries, red or black currants in a very little water and with sugar to taste, and serve cold. (See also under "FRUIT.") The fruit, of course is washed, each in its own way, picked, pared or stoned as necessary. The compote may be thickened by adding a little flour or potato meal. Some like to flavor with a little cinnamon, lemon-peel, etc. The addition of a little fried butter to stewed apples makes them very palatable.

STEWED DRIED FRUIT. All dried fruit must be soaked for at least six hours before being used for stewing. It is best to well wash the plums, apples, cherries, etc., and keep them covered all night with water in clean, earthen vessels; boiling them slowly next morning over a small fire. By this means the saccharine substance is drawn out and the addition of sugar becomes unnecessary.

Diet, Mixed. (Dishes Prepared From Eggs.)

EGGS. Hard boiled eggs are very indigestible; soft-boiled easily digested. It is important that salt should be added not only for taste but for digestion. Hard-boiled eggs should always be cut up into small pieces.

Dishes prepared from eggs, flour and fat are decidedly indigestible for patients and convalescents.

Eggs may be tested as follows:

1. If a fresh egg be held to the light, it should be transparent throughout; in a bad one the light will at once show the dark, cloudy spots.

2. A fresh egg will sink in water in which 5% of common salt has been dissolved, a bad one will float on the top.

3. Put the eggs on a wire-sieve, put a light under it in some dark place, and the good eggs will appear bright and clear.

FRIED EGGS. Put three ounces of butter in a pan, and leave it till it rises in froth; break the eggs gently into it, so that they may remain whole, put some salt on, and let them stand over a slow fire till the white has set.

HOW TO BOIL EGGS SOFT OR HARD. Put the freshest eggs obtainable into a saucepan full of boiling water, boil them for from two to three minutes, if they are to be soft, and from four to five minutes if they are to be hard; take them out and put them into cold water, so that the shells may come off more easily.

OMELETTE. Soak some pieces of bread in water, or preferably in milk, squeeze them out, and put on a dish, add eggs, flour, salt and nutmeg, and stir. Grease a saucepan or frying-pan with bacon, brown some butter in it, throw your mixture in, and fry it, shaking it repeatedly. The omelette may be raised now and then with a thin broad knife, to prevent its sticking to the pan. When one side is of a golden-yellow, put a plate over the pan, turn the omelette on to the plate, put some more butter in the pan, and fry the other side the same way; put sugar and cinnamon on it, and serve with stewed fruit, salad, or a sweet sauce.

SCRAMBLED EGGS are made in the same way, except that they are first broken into a basin, and then well stirred in the frying pan.

Diet, Mixed. (Beverages.)

CHOCOLATE MADE WITH WATER. Put about five ounces of grated chocolate into a pint of warm water, stir and boil it (best in an earthenware vessel). As soon as froth forms, take it off with a spoon and put into the chocolate cups, or the chocolate when it has well boiled may be poured direct into them.

CHOCOLATE MADE WITH MILK. Put a quarter of a pound of grated chocolate into a quart of boiling milk, let it boil up, and whisk the yolks of four eggs into it.

CIDER, BERRY AND HOME-MADE WINES. Press out the juice of any kind of fruit. If apples or pears are taken they must be first grated; put the juice into small casks, and let it ferment, mix together so as not to fill any casks quite full. Bung the casks when they are full, put them in the cellar, and let them stand there for from five to six weeks, then bottle off and cork well and tie them down. If used within six

months it will effervesce like champagne, if kept longer it will lose this property, but will increase in strength.

GERMAN BEER-SOUP. Boil a quart of beer (the lightest kind obtainable) and a pint of milk separately, skimming the beer before it begins to boil. Whisk the yolks of three eggs with a small spoonful of flour and a little cinnamon into a cup of milk, pour this into the boiling milk, stirring all the time, then add the boiling beer, and after some sugar, butter and a little salt has been added, let the whole simmer for a while.

DIET FOR PATIENTS AND CONVALESCENTS.

It is a great mistake to suppose that patients and convalescents can be benefited by so-called strengthening diet, by which term is generally meant meat, wine, eggs, extract of meat, beef-tea and the like. On the contrary, by taking such food recovery is only retarded and relapse is often caused, because a weakened organism can only digest the very lightest of food. A disordered or weak stomach or one suffering from the effects of an illness lately thrown off should only have rice boiled in water together with stewed plums, apples, etc. (later on a little browned butter), as well as thin soup made of ground groats, meal and coarsely ground wheat (patients with disordered stomach should not take too much whole-meal bread or coarsely ground wheat soup); moreover, fruit raw or stewed and later on milk, etc., may be given, and then, by degrees, pass on to a non-stimulating diet. By proceeding in this way recovery and gaining of strength will be ensured without the danger of a relapse.

Many diseases, such as, *e. g.*, those in which the stomach is not irritated, are cured most quickly if for some time only whole-meal bread and fruit are given.

People of weak digestion may try the addition of a few drops of lemon juice to their food, as this promotes digestion; fresh pure soft spring water only should be given to drink. It may, however, be mixed with a little fruit juice and sugar.

As the food of man is, so is his blood, as his blood is so is his energy, and as his energy is, so is his health.

Non-stimulating food, free from disease germs, forms pure, healthy blood free from germs of disease, and the same is true of pure or impure air.

As both in the question of food and of medicine great errors prevail amongst the people to the prejudice of the patients, we here also call attention to the "OPINIONS OF MEDICAL MEN ON THE TAKING OF MEDICINE" (see Index), with a view to convert the injurious inclination for

drugs, which is so prevalent among the people, into abhorrence, and destroy their misplaced faith in medicine.

It is not always sufficient to prescribe a non-stimulating and easily digestible diet for all patients, ***but it must be suited to the particular patient and his ailment and tested from time to time as to its good or contrary effect, a procedure which is, unfortunately, only too rarely attended to even by Natural Healers.***

Food or diet is the most important question in nursing the sick.

The art of determining a suitable diet consists chiefly in selecting such food as the stomach can digest perfectly and without too much exertion, and in such a manner that the nourishment which the body has received in too small or too great a degree, *e. g.*, fat, starch, albumen, etc., or perhaps water, for lack of which the disease may also have been caused, may be supplied in proper quantity.

Moreover, in observing the nourishment of the body, and particularly of a sick body, the rules regarding the utilization of food must be more carefully followed by the attendant doctor than has been the case hitherto.

We do not live upon what we eat and digest, *i. e.*, upon what is merely acted upon by our digestive organs, but solely and entirely upon what is actually assimilated by the body. Everything else passes off as waste material, not only without benefiting, but often causing serious injury to it.

Further it should be remembered that what is unnecessarily inflicted upon the body in the form of nourishment, in the time of illness, feeds the disease rather than the body; the so-called nourishing and stimulating food must be withheld, in order to cut off what matures the disease. Abstention from food permits the organism to do its healing work most effectually, because, if left alone and not burdened anew by superfluous ballast, it is in a position to expel the morbid matter, in which the illness has its origin, and to heal itself with what it extracts from non-stimulating, easily digestible food.

Taking too much food is overfeeding, by which we mean not always merely taking too large a quantity of food, but by overloading the body with food which contains too small a percentage of that particular kind of nourishment, *i. e.*, albumen, fat, etc., which the patient particularly requires.

It is, therefore, necessary to consider and compare the relative value of foods as well as the condition and state of the body and its activity; see "FOOD, ANALYSIS OF."

The following elements are the chief component parts of the human body:—Oxygen, hydrogen, nitrogen, carbon, sulphur, phosphorus, iron, sodium, potassium, etc.

The principal nutritious matter required by the human system are:—

I.—Albumen.

II.—Fat.

III.—Carbon Hydrates (as starch, sugar, dextrine, etc.), which are chiefly found in cereals and their products (flour, bread), potatoes, vegetables, plants, etc.

IV.—Water (this simple nutriment), consisting merely of oxygen and hydrogen, is in spite of its simplicity of the greatest importance for the human body; the body of an elderly person consists of 75%, that of a younger one still more, even as much as 90% of water. Consequently our food should contain water in the same ratio, except in certain illnesses in which a dry diet should be observed.

V.—Mineral salts.

These five principal species of nutriment must be supplied to and be present in the body in a certain proportion if man is to be healthy and remain so.

If, however, too much or too little of one or more of these be taken, disorders in assimilation, *i. e.*, illness results.

Diseases thus caused can only be healed by removing the primary causes just as in other illnesses, *i. e.*, by increasing or decreasing, as the case may be, the proportion of the various kinds of nutriments.

It has been ascertained by recent investigations that the highly important nutriment called albumen only builds up the body but cannot supply it with heat or strength, and that this is done by fat and carbon-hydrates, a fact which must be most carefully considered in prescribing a form of diet.

Many illnesses arise in consequence of general overfeeding.

Further, the temperature of the food taken, which may vary according to the patient, should to be considered.

In many cases cool nourishment is advisable, in others food should not be above 90° F.

Dr. *Sturm* says, "Proper diet is the basis on which the art of healing should rest. This is the very foundation without which no attempt at healing can be justified. For as the organs are built up of nutriment, it is only from this that the possibility of living exists in our body".

Many diseases are never cured for want of a proper diet. The incurability of many diseases may be attributed to the imperfect study of other influences on the body.

If a patient be given the food which his ailment requires, he will in the majority of cases recover.

In concluding this article I must still call attention to the fact that sufficient perseverance is indispensable both in taking food suitable to the organism as well as in careful attention to the modes of application adapted to the disease in question.

Unfortunately the contrary is experienced too often, viz. that a patient, who has suffered for years from a deep-seated ailment and has changed his medical adviser a number of times, has taken the waters of some famous springs or has resorted to quacks and patent medicines of all kinds and finally has recourse to the Natural Method of Healing. (As a rule the experiment is not made until there is no other hope and the patient is practically beyond recovery.) If in a few days or weeks the patient does not notice a very considerable improvement (slight improvements are scarcely acknowledged), he says there is nothing in it and gives it up.

Such patients are certainly not the kind we should like. He only will find sure and certain cure, if such be possible, who with firm faith and confidence and stern will recognizes the Natural Method of Healing as the only true method and, adopting it, continues it for a sufficient length of time.

This perfect confidence in the Natural Method of Healing is only to be acquired by experience; he who has no experience not only does not place it higher but frequently lower than any other method, and that is, considering the prevailing opinion with regard to this new method, hardly to be wondered at. Still whoever has had sufficient experience will agree with me that as truly as only one sun exists for our earth, so truly does only one method exist for the sick and ailing, and that is the Natural Method of Healing and its various branches.

DIET, NON-STIMULATING (also called vegetarian and natural diet). Most diseases originate in a more or less erroneous dietary, therefore besides using the following non-stimulating foods the greatest care must be taken to arrange a proper combination of nourishment for each individual patient. For instance, in many cases the body is overloaded with albumen, fat, etc., and there is a deficiency of carbon-hydrates, salts and water; in other cases the cause of illness being perhaps exactly the reverse. In many instances also the cause is insufficient digestion of food, but often both of them contribute to the result. Disease frequently consists in one or more organ of the body being too well nourished or not active enough, and the reverse. All this requires most careful consideration, which is one of the doctor's most important functions.

If, for example, an excess of one or more kinds of nutriment, such as albumen, fat, carbon-hydrates, etc., or a deficiency of these is present,

often only to be detected after careful observation and consideration on the part of the doctor, the disease must be remedied by a suitable combination of foods.

Should the cause consist in inadequate digestion of food, an increase of the functions of the body or capacity for using up food must be brought about or rather facilitated. If one or all the organs be too well nourished, or the reverse, *i. e.*, not active enough, in the first instance the overfeeding must be discontinued, and in the second the deficient activity increased or the reverse. See also "FOOD FOR INVALIDS" and "DIET"

By non-stimulating diet we understand firstly all kinds of bread. also white bread, particularly whole-meal wheaten bread, then all foods made with milk and eggs, vegetables, porridges and soups, made palatable with milk or butter.

We draw special attention to beverages and soups made with wholemeal, the latter of grated whole-meal bread, fried in a little butter, perhaps made palatable with a little milk or cream; then, above all, curds, buttermilk, sour milk, fruit, stewed berries, which may be partaken of at every meal.

The chief beverage should be pure water, as soft as possible*), which may be mixed with the juice of fruit, such as raspberry and lemon juice, cider or sugar. Then milk, buttermilk, chocolate, cocoa, beersoup, etc. Then extracts made from roasted wheat or barley, and decoctions of young strawberry, blackberry and woodruff leaves, further artificial coffees (substitutes for coffee). In slight cases of illness also light, well fermented beer, natural wines and weak coffee.

Meat, broths and meat extracts are to be avoided or used very sparingly on account of their heating properties, by which febrile diseases especially are aggravated. Should a piece of meat be specially desired, it may be partaken of occasionally in light cases of illness without fever. but the quantity should be small; for instance a little piece of roast veal. tender beef, young poultry, fish or the like. On the other hand all smoked or pickled meat, or such as has been over-boiled for soups should be avoided by invalids, as well as strongly spiced and salted dishes. In most cases too, vegetables with husks should be avoided (on account of their indigestibility), as well as alcoholic drinks, such as brandy, strong beer, strong wine, etc. likewise strong coffee and tea.

Above all, see "DIET FOR INVALIDS".

Persons will do well to provide themselves with a vegetarian cookery book or with vegetarian recipes, in order to obtain a clear idea of what is meant by a non-stimulating diet.

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*) Hard or impure water is a fruitful source of diseases of the liver and kidneys. Prof. TRALL.

Diet, Non-stimulating. (Gruels.)

These are very thin sorts of porridge. They are particularly suitable for convalescents after acute illness, or in obstinate cases of constipation, etc. Wheat-, maize-, rye-, and oat-meals are used in making gruel. About two dessert-spoonfuls of meal must be mixed with cold water, and then stirred into two to three pints of boiling water, and boiled slowly for fifteen minutes. Rice gruel is often useful in cases of diarrhoea.

ANOTHER SORT OF GRUEL, between porridge and gruel. Flour or oatmeal is usually employed; half a pound of flour and three pints of water is the right proportion. Cook for about twenty minutes. Raisins, currants, or dried berries may be added if desired. See also "Soups".

Diet, Non-stimulating. (Water Soups.)

FLOUR SOUP. Stir a table spoonful of good wheat flour or rye-meal into cold water, beat into half a pint of boiling water, and boil up a few times with salt and fresh butter, stirring all the time.

FRUIT SOUPS of every kind can be prepared with any sort of fruit, dry or fresh, or sultana raisins. These must be boiled with plenty of water, and the whole then stirred up with rice, barley or oatmeal, or with sago to make the soup thick. Sugar according to taste.

HARICOT-BEAN, PEA AND LENTIL SOUP. These vegetables must be boiled thoroughly in soft water. If hard water only be obtainable, boil them up and let them get cold again before using. Rub off the husks (not necessary for persons in strong health) and finish cooking with butter, potatoes and herbs. White bread fried brown in butter, or simply toasted and cut into dice, is very good with bean or pea soup; with lentil soup an addition of dried damsons may be used.

MEAL SOUPS are all made in the same way: three quarts of water with salt brought to boiling point, then half a pound of meal (whole-meal, flour, oat or barley-meal) stirred into cold water, and boiled up a few times together. If currants, raisins or dried cooked fruit be added, it is more palatable; a little butter must not be forgotten.

PANADA. The crust of brown bread, pumper-nickel or rye bread soaked overnight in cold water, then thoroughly boiled with plenty of water, and put through a sieve. Add butter, salt, and sugar, and slices of raw apple; or, instead of the latter, raisins previously boiled (sultanas are best) or damsons; then boil up again. Instead of adding fruit, milk and aniseed may be stirred into the soup when ready. (To three quarts of soup half a pint of milk.)

ROLL SOUP. Cut a small stale Viennese roll into slices, pour boiling water over it; beat thoroughly and pass through a sieve; add a little salt and fresh butter, and boil up again.—Or the roll may be sliced into a plate, salt and butter added, boiling water poured over it, and the whole stirred.

PEARL BARLEY SOUP. Take half a cupful of large pearl-barley well scalded, and boil it slowly in a pint of cold water for from one and a half to two hours. Rub through a sieve, and boil up with salt and fresh butter.

POTATOE SOUP. The potatoes must be washed clean, well covered with water and boiled till done; sweet herbs, green leeks, celery (or dried herbs) are boiled soft separately in water and then added. Add butter or oil according to taste, and boil all together with whole-meal, flour, oat or barley-meal. Or the potatoes may be put through a sieve

PREPARATIONS OF OATMEAL. Oatmeal soup, gruel, porridge, and oatmeal water, are preparations of oats and water, and may be partaken of lukewarm or cold. Groats and oatmeal or even the grains of oats may be used, but the latter must be thoroughly boiled down. This glutinous and digestible food possesses remarkably valuable nutritive properties; it is healing and strengthens the nerves, improves the composition of the blood, promotes the various functions of the body, especially the secretions of the kidneys, and is at the same time perfectly harmless. This food renders the greatest service in diseases of the kidneys and bladder, in all kinds of rheumatic affections, in a morbid condition of the humors of the body (cachexia), in nervous and in all kinds of febrile diseases. Professor *Becquerel* speaks of it as follows in his Handbook of Hygiene: "It is far more nourishing than is usually imagined. It is often found that the stomach will retain this when it rejects every other sort of liquid nourishment. It is well known that gruel is frequently used in febrile diseases, especially in inflammation of the mucous membrane, as a demulcent remedy promoting the secretion of mucus, and it is only to be regretted that people, when in health, make too little use of this excellent article of food. Gruel is probably the best substitute for ***that wretched coffee, which only wastes the strength and makes people nervous.*** There is no better morning drink for children. The best method of preparation is as follows.

Wash the groats (for four people a cup or four brimming dessert-spoonfuls) and boil them with a little salt and lemon peel in plenty of water for from one and a half to two hours, till the soup is glutinous. Then rub it through a fine sieve, add lemon juice, raisins and a little sugar, cook over a slow fire for half an hour, and finally add some butter.

When made of oatmeal the soup is not so good, but the preparation takes less time.

Three dessert-spoonfuls of oatmeal (for four people) are thoroughly stirred with a little water, and then poured slowly into three pints of boiling water in which a little salt and half a dessert-spoonful of butter have been previously dissolved, stirring all the while. Go on stirring while it boils up, then draw the saucepan on one side, and let the soup simmer for a quarter of an hour at the side of the fire, stirring occasionally. It is not necessary to take oatmeal soup in large quantities.

An oaten dietary has proved itself to be the most certain restorative, and is even efficacious in cases where all other so-called tonics leave us in the lurch; I know of no better remedy for building up a broken down constitution. I advise everyone suffering from weakness to take porridge and gruel daily, and I know that they will be grateful to me for this advice. Thin and emaciated persons can be "fed up" on this diet in a short time. Anaemic girls, and delicate women suffering from the effects of confinements, who are visibly getting worse while partaking of beef-steak, broths, wine, and preparations of eggs, take a turn for the better at once on being fed on porridge and oaten soups. This food also agrees excellently with pale and badly-developed children, particularly during their school-days when such large demands are made on their youthful constitutions; they become rosy, strong and blooming. In short, oats are unequaled as a restorative, and can therefore be as strongly recommended to invalids as to persons in health.

RICE SOUP. Stew two or three ounces of well-washed rice till soft with a little water and butter. Beat a little flour, some salt and butter well into a quart of boiling water, and boil until it forms a thin, glutinous soup. Then add the rice.

SEMOLINA SOUP. (For two persons.) Soak half a cupful of fine semolina in a little cold water, then pour it into a pint of boiling water, stirring all the time, and after adding some fresh butter boil for a quarter of an hour.

WHOLE MEAL SOUP, WHOLE MEAL WHEATEN SOUP is prepared in the same way as whole meal water, except that in this case rather more wheaten meal is used; to one quart of water two and a half to three ounces.

WHOLE MEAL SOUP MADE OF GRATED WHOLE MEAL WHEATEN BREAD. Grate whole meal wheaten bread, fry it in butter, put it into boiling water with a little salt, let it boil up well; beat up or stir an egg well in cream, and stir into the soup, which must then be left to draw a little over a moderate fire. With the doctor's permission, all

these soups may have the addition of milk instead of butter; also of sugar.

Diet, Non-stimulating. (Milk Soups.)

For two persons take half a pint of milk, and if really pure and fresh from the cow boil up with half a pint of water (otherwise without water). Add a heaped-up table-spoonful of flour stirred into cold milk, and boil for a few minutes with a little salt.—Instead of flour, potato meal, arrowroot, maize, or tapioca may be used, but all of these, with the exception of potato-meal, must be boiled for ten minutes. If semolina be used, half a cupful is required, which must also be stirred into cold milk, and boiled for a quarter of an hour, stirring all the time.

Diet, Non-stimulating. (Light Broths.)

BREAD SOUP. Cut a small Viennese roll into slices, and pour half a pint of boiling broth on it.

GELATINOUS BARLEY SOUP. For two persons take half a cupful of coarse pearl barley, well scalded, put on with one quart of cold water boil for from one and a half to two hours slowly, pass through a sieve, and add to one pint of light pure broth.

MACARONI SOUP. Boil two dessert-spoonfuls of home-made macaroni till soft in one pint of light, pure broth; shake the macaroni into the boiling broth.

SEMOLINA SOUP. Stir three table-spoonfuls of semolina into some cold broth or when this is not procurable into water, and boil in one pint of light, pure broth for a quarter of an hour.

Diet, Non-stimulating. (Beer Soups.)

BEER SOUP. Boil half a pint of light porter thoroughly with a little aniseed and a few pieces of stale bread, then pass through a sieve, and boil up again with a little bit of butter and some salt. Stir into this an egg and some potato-meal beaten up in cold beer.

BEER SOUP WITH MILK. Boil half a pint of beer with sugar, salt and butter. Beat up a table-spoonful of flour in milk until it is quite clear, pour into the beer stirring all the time, and boil up. For other soups, see "DIET, MIXED".

Diet, Non-stimulating. (Beverages.)

APPLE WATER. Cut a few moderately sour apples in small pieces, and boil in water for a quarter of an hour; pour through a hair-sieve; let it cool, and give the patient as drink, adding a little sugar.

EGG WATER. Beat up the yolk of one egg with two teaspoonfuls of sifted sugar into a froth, and mix with one quart of cold water and two spoonfuls of claret.

OATMEAL WATER. Boil one desert-spoonful of oats in one pint of water till soft, pour through a sieve, and when cold add sugar and claret.

RICE WATER. Boil three ounces of rice for half an hour in one quart of water; pour off the liquid and add a little sugar and lemon juice.

TOAST AND WATER. Let a few pieces of toasted rye-bread soak in water for two hours; pour off the water, add sugar and a little fruit or lemon juice.

WHOLE MEAL WATER, WHEATEN WHOLE MEAL WATER. Stir into one quart of boiling water one and a half to two ounces of whole wheat meal, and to prevent the meal getting lumpy bring the water off the boil by adding a little cold; add salt, and boil thoroughly for from five to ten minutes. To render more palatable, a little butter, good milk or cream may be added, or an egg beaten up in it.

See Index for "WHOLE MEAT DRINK FOR INFANTS AND YOUNG CHILDREN". For other beverages see "DIET, MIXED".

Diet, Non-stimulating. (Bread.)

FRUIT-BREAD. Stewed apples, pears, peaches, cherries, currants or berries may be mixed with unbolted flour and baked into fruit-bread. A little sugar will change it into fruit-cake.

HOW TO MAKE WHOLE MEAL BREAD. (Wheaten). For further information read the article on "WHOLE MEAL WHEATEN BREAD", see Index. As we learn in the above mentioned article, by removing the bran from the flour valuable nutritive properties are lost and, as is well known, the nutritive properties are destroyed by adding fermenting agents (German yeast, barm, baking-powder, carbonate of soda) to the dough, thus rendering the bread unwholesome. It would therefore seem advisable to use bread made from unbolted meal, with the addition of a little water only, nevertheless we civilized people are frequently so degenerate that such an ideal bread is, in the first place, unpalatable, and secondly we often find that it disagrees with us, so that it is expedient to remove the coarsest bran from the meal, or better still to peel the dry wheat and other kinds of grain, and to make the bread as light as possible; for this reason when necessary a little yeast may be added. (The chief condition for the good digestion of whole-meal bread

is thorough mastication). True whole-meal bread (also called Graham, brown, or bran bread) is prepared much as follows: Take whole-meal, produced by means of a grist, or hand cribbling machine, add luke-warm water, and knead into dough, not too stiff; cover well, and leave in a moderately warm place until the dough rises, make into loaves two to three inches high, and bake in a quick oven. The crust will remain soft if the steam cannot escape, *i. e.* if the oven is hermetically closed. We should recommend convalescents, and especially persons with weak digestions, to eat "digestive" bread, that is to say bread from which the coarsest bran has been removed and has been rendered light by the addition of a little yeast (or of grated potatoes). Whole-meal bread can be made much lighter by the addition of raisins, dates, figs, dried or fresh fruit, and this is also much lighter and more palatable (so-called fruit-bread).

If such whole-meal bread is not obtainable, try to get slightly acid rye-bread or Westphalian Pumpernickel, or ordinary brown bread. Pumpernickel and white bread eaten together will often suit delicate digestions. But in any case, do not eat whole-meal or other bread exclusively; nature points to juicy fruits more than to grain foods as suitable nourishment for the human body.—It is very advisable to eat the kinds of bread recommended in turn, or to have several in use at the same time.

OTHER BREAD. Mix wheaten flour with cold water to the consistency of butter. Pour the dough into a suitable baking pan—the bottom of which must be covered with flour to prevent sticking—and bake in a quick oven. The paste can be half an inch in thickness, or thinner, according to how it spreads; the thinner the better, only that when very thin a large oven is necessary in order to bake plenty of bread. On this account rolls are most convenient for families, but any one making only for themselves, and not caring for the trouble of kneading, will find this sort of bread most suitable. I have often made it, and on a gas stove it was ready in less than two minutes.

LOAVES. Very good loaves may be made of six parts of wheat-meal, two parts of maize, and one part of mealy potatoes. Mix with boiling water and bake in the ordinary way.

ROLLS. Mix wheat-meal (unbolted wheat-meal is always meant) quickly with boiling water, by stirring vigorously with a stick or a strong iron spoon into a soft paste; after it has cooled, knead a little with the hands, make into small thin cakes or rolls, prick them to prevent bubbles forming, and bake for about twenty minutes in a hot oven. The baking board—an iron one is best—must be strewed with good dry flour to prevent the dough from sticking.

The cakes may be barely half an inch thick, and from one and a half to two inches wide. If made into rolls (which is the best shape because a large surface is then presented to the heat, and a thinner and more tender crust formed) these may be about the length and thickness of a finger. With a large quantity of dough the square shape is best. The dough must be rolled out into pieces from of an inch and a half to two inches wide, and these cut through in the centre. The knife, rolling-pin and board must be well covered with good dry flour.

RYE ROLLS. Unbolted rye-meal can be used for making rolls in the same way as wheaten meal, or baked in flat cakes. This is very wholesome, light and palatable.

WHEAT-MEAL RUSKS. These are distinguished from rolls by their dryness, hardness and crispness. To obtain these qualities the dough must be well kneaded, and then baked in a brick oven until the moisture has completely evaporated. If kept dry the rusks will preserve their sweet and very agreeable taste for several weeks; in a very dry and very cool spot they will keep good for several months. Size and shape may resemble those of ship rusks. All invalids should provide themselves with these when travelling.

Diet, Non-stimulating. (Cakes and Pastry.)

APPLE PUDDING. Slice the apples, and place them in a mould in layers with the mentioned below white bread-pudding or slices of brown bread. It is better to bake than to steam this pudding.

BREAD FRITTERS. Soak some slices of stale white bread, about the thickness of a finger, in milk, then fry in butter strewed with sugar. For further recipes see Index.

MAIZE CAKE. Moisten some coarse whole-maize meal with boiling water, roll the paste in one or more cakes half an inch thick, and bake in a hot oven. Some prefer to make the paste with cold water.

OATMEAL CAKES. These can be made in the same way as the wheaten rolls.

OPEN FRUIT TARTS. When these are prepared by a baker or confectioner they have not, as a rule, the slightest dietetic value. They should not, however, be regarded simply as luxuries, but can also be made conducive to health. The necessary ingredients are almost any kind of fruit, some sugar, a handful of flour, or of rye and maize-meal, mixed with mealy potatoes. Pumpkin tarts require the addition of milk.

PANCAKES. Stir three eggs, a pint and a third of milk and three spoonfuls of flour or whole wheat meal together, add a little salt and fry

with oil or butter in a pan.—For apple or damson fritters, cut the fruit in slices, and stew with a little butter. When soft add the paste, and fry on both sides till done.

POTATO FRITTERS. Grate raw potatoes, mix a little salt with them, and to four pounds of potatoes stir in one egg and some milk. A table-spoonful of this paste made smooth will make one fritter, which must be fried in oil till it rises a good deal in the pan.

PUMPKIN TART. Mix flour with half as much boiled pumpkin, add enough milk, and bake in a pan.

WHEAT MEAL SCONES. Knead whole wheat meal with water, a little milk, plenty of raisins and a very small amount of yeast into dough A little butter or good olive-oil must be added, and when the dough rises it should be made into longish scones and well baked. This makes a light and very palatable cake.

The scones may also be prepared in the same way, or nearly so, as oat-meal or oaten whole-meal.

On account of the extremely nutritious properties of oats, oaten bread is in many ways preferable even to wheaten bread.

It can be made:

1. From unbolted oatmeal (the husks being removed).

2. From oatmeal. (Taking the mean weight of this as one hundred, there should be about sixty parts meal and forty parts bran.)

3. From oatmeal and whole wheat meal, about half of each.

Raisins, dried currants and good apples are very suitable for mixing with oaten bread.

Also milk may be used wholly or partially in the place of water.

To render the bread more palatable and more suitable for weak digestive organs, it is advisable to let it ferment.

If the bread tastes bitter, it must be attributed to the poor quality of the oats.

Porridge with raisins or apples also makes a good dish. In many mountainous districts of Germany the people formerly lived chiefly on porridge, and there sprang up a fine, healthy, rosy-cheeked race such as is seldom to be found there now-a-days.

Diet, Non-stimulating. (Puddings.)

APPLE JONATHAN. Fill a pie-dish two-thirds full of sliced sour apples, sweetened to taste; then mix flour with water and milk (a little cream makes the crust more tender) into a batter, pour over the apples till the dish is full, and bake until the crust is browned.

APPLE PUDDING, GOOD. Take equal quantities of very sour apples, well boiled and sweetened, and of roll or rusk, which has been soaked previously in cold water; mix and warm thoroughly for a few minutes. Any sour fruit is suitable.

BREAD PUDDING. Take one pound of white bread or rusk, soaked in a pint of milk, from half an ounce to an ounce of raisins, three eggs, some sugar and butter; stir up together and proceed as in the whole-wheat meal pudding.

MAIZE PUDDING, BOILED. Moisten coarse maize meal with boiling water, add some sugar or treacle, tie the pudding in a cloth, leaving room for it to swell, and boil for three or four hours.

PUDDINGS. I consider all these dishes, even when made in the simplest manner, as things which are permissible but not advisable for invalids. Maize-meal, rice and semolina are the most suitable ingredients for puddings. Sago and pearl-barley may also be tolerated. Boiled and sweetened pumpkin with some wheat or maize starch, with or without milk, makes a very simple and light dessert which many people like very much.

RICE AND APPLE PUDDING WITHOUT MILK. Boil rice pretty soft, stir into it sliced sour apples, and boil for about twenty minutes.

RICE PUDDING. Boil half a pound of rice with milk to a stiff porridge; then stir in three eggs, a spoonful of melted butter, and sugar, and boil or bake as above.

SEMOLINA PUDDING. Boil half a pound of semolina until stiff in a quart of milk. Before it is cold add three eggs and some sugar—then as above.

WHOLE WHEATEN MEAL PUDDING. Stir up one pound of whole meal with three eggs, a quart of milk, a spoonful of oil and a little sugar and salt. Put the paste into a mould which closes tight, and has been previously floured inside, and then place the mould in a saucepan of water, which must be kept boiling for three hours and a half. The water in the saucepan must reach half way up the mould, and care must be taken that as it boils away more water is added, or the pudding will burn. Open the mould slowly and carefully.—Or the paste can be baked in an open mould previously oiled inside; time required, three hours.

Diet, Non-stimulating. (Porridges.)

These are preferable to puddings. Wheat and maize semolina make the best porridges. Coarse wheat semolina requires boiling five or six hours. For an ordinary family it may be ground in a large coffee-mill.

Fine semolina takes an hour and a half to boil. Rye-, maize- and oatmeal also make a good porridge. Rice may boil for from fifteen to twenty minutes; when stirring avoid breaking the grains, then pour the water off, and let the rice steam for fifteen minutes. When cold, any sort of porridge can be cut in slices, and gently browned in the oven, by which means it is as good as or even better than when fresh.

MILK SEMOLINA. Take barely a cupful of fine semolina, stir into some cold milk, and boil in a pint of milk over a slow fire, stirring all the time, until the fluid has quite boiled away. Add gradually three pints of milk, until the semolina is soft enough. For other porridge see "DIET, MIXED."

Diet, Non-stimulating. (Sweets.)

MILK RICE. Soak half a cupful of rice in water for several hours, scald it three times, and then boil till soft in one pint of milk with lemon-peel and sugar. As soon as it is cold serve with fruit syrup, which should be slightly diluted. Or make the following sauce: boil together a quarter of a pint of water, a glassful of wine, lemon peel, cinnamon and sugar, to which add afterwards a teaspoonful of potato flour, arrow-root or maizena beaten up in cold water, stirring all the time. Boil all together for from seven to ten minutes.

RICE WITH APPLES OR RAISINS. Wash and shake some rice well, boil soft with water, salt, butter and a little sugar, (half a pound of rice to three quarts of water); then add boiled raisins or raw sliced apples; place on the rice, and finish boiling.

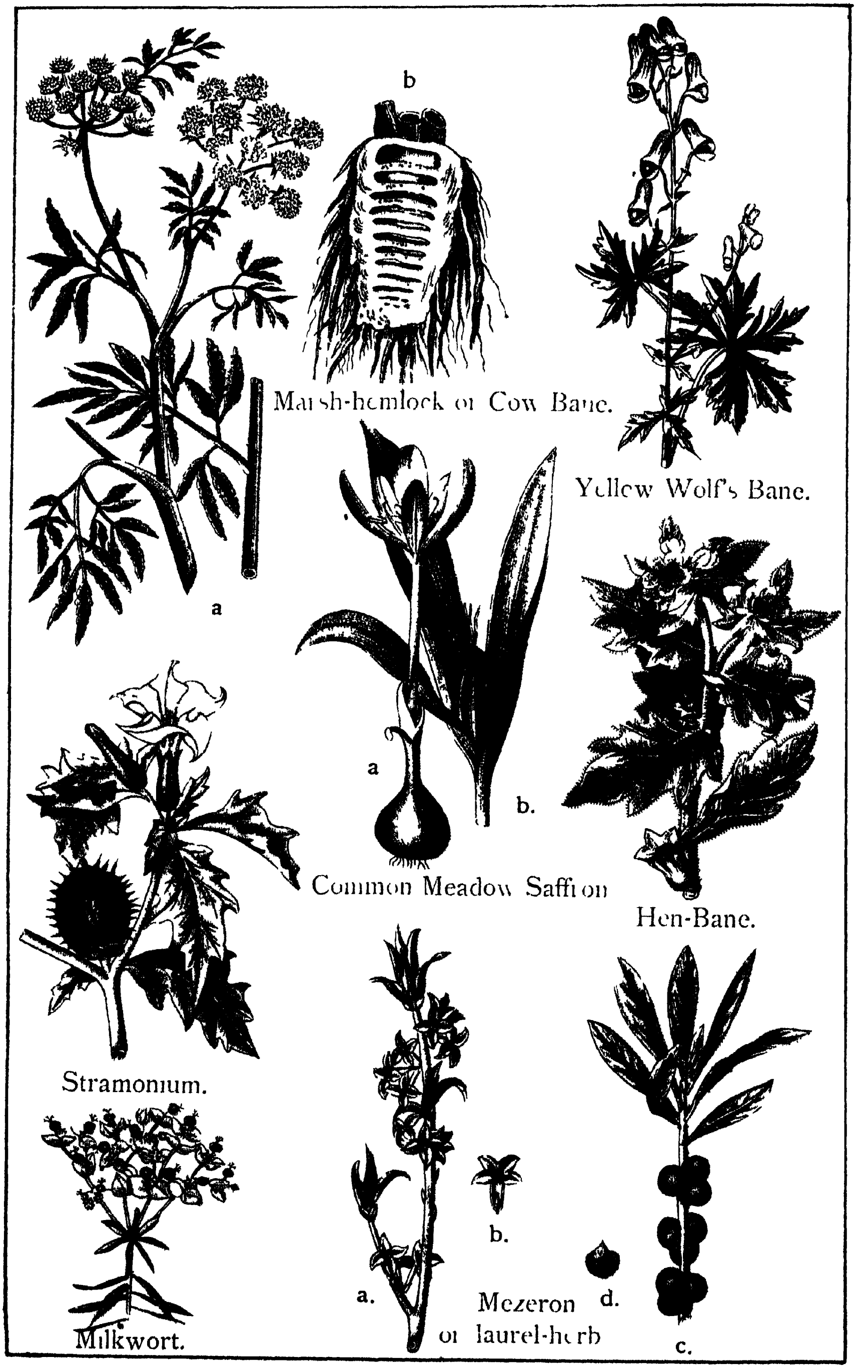
RED MOULD (use home-made fruit syrup). Boil half a pint of raspberry, half a pint of red currant, and a quarter of a pint of cherry syrup lightly, and, stirring all the while, add two or three dessert-spoonfuls of maize, rice, potato meal or arrow-root, which has been previously stirred till smooth in water. Let it boil till soft, and serve cold.

Or: Stir two dessert-spoonfuls of fine semolina or tapioca smooth in water, then boil soft in a quarter of a pint of water with sugar; add half a cupful of claret and boil up again.

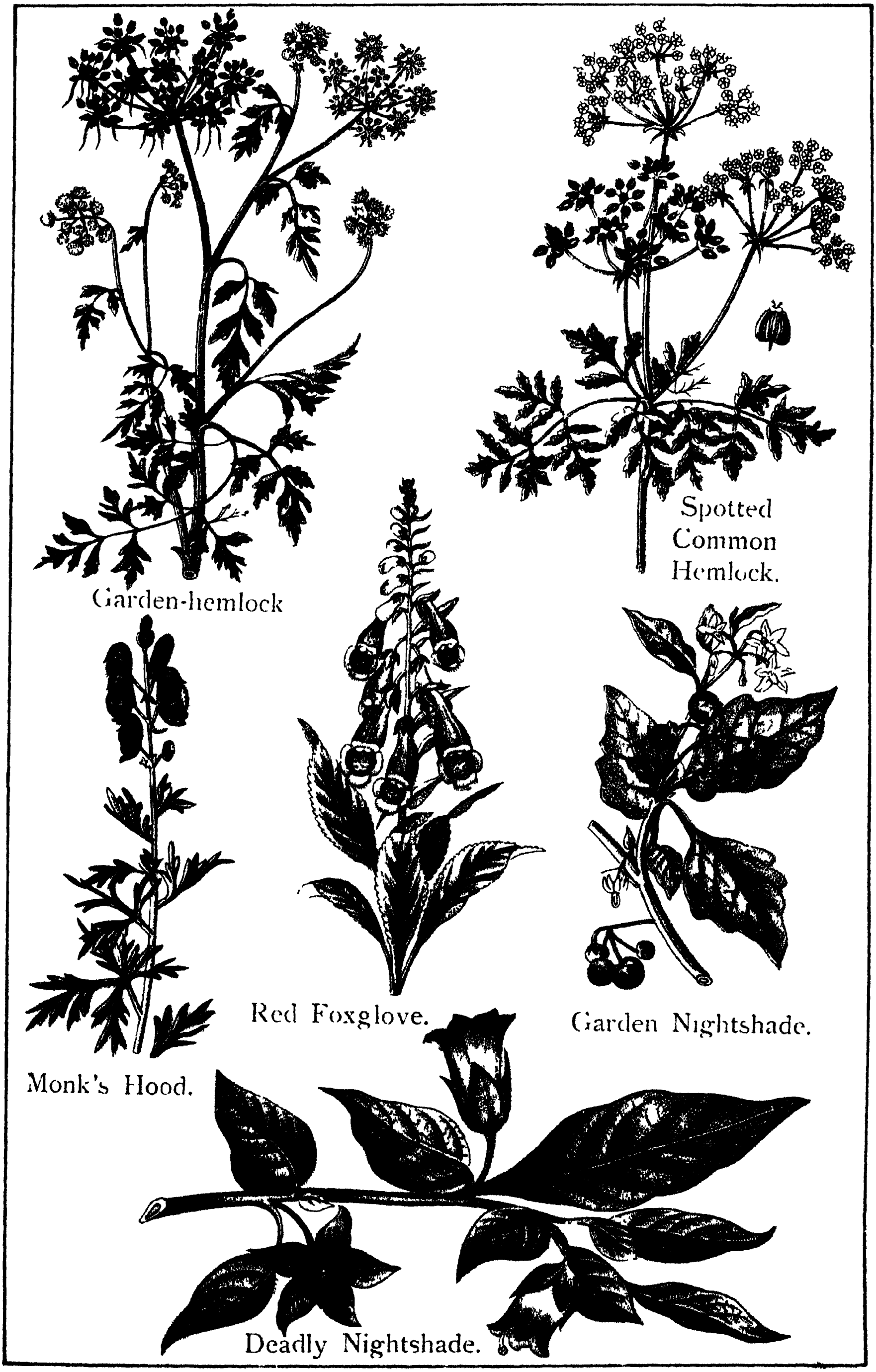
(No food must be eaten hot.—Add but little salt.—Instead of flour, whole wheaten meal may be used.—The soups made with stock, and foods mixed with wine are permissible but not advisable for many patients.—Pure water is always the best beverage. (The Author.)

Diet, Non-stimulating. (Vegetables.)

Poisonous Plants I.



Poisonous Plants II.



APPLES AND POTATOES.*) Boil the potatoes well, then place on them fresh sliced apples and butter, and continue boiling all together. Fresh stoned damsons may be treated in the same way. Be particular to first boil pears or dried fruits before they are added to the potatoes.

PEARL BARLEY AND DAMSONS. Boil coarse pearl barley with water, butter and salt, for from four to five hours till soft; then mix with dried damsons which have been previously boiled till soft.

SPINACH must be boiled soft in water, the water squeezed out, and the spinach then chopped, afterwards boil thoroughly again with the milk-sauce described in "DIET, MIXED."

A favorite dish when served with fresh eggs and slices of toast.

VEGETABLES WITH MILK SAUCE. Mix a spoonful of flour and butter thoroughly, then boil with milk till they form a smooth sauce. Pour this over vegetables,—cabbage, kohlrabi, cauliflower, or French beans—which have been boiled soft in salt and water, and carefully strained.

YOUNG VEGETABLES. Asparagus is boiled in salt and water till soft, the water strained off, and pure melted butter added. Young beans, peas and root vegetables are boiled in water with butter and some salt; when soft strew a little flour over them, let them boil thoroughly, and then add chopped parsley.

Diet, Non-stimulating. (Puddings and Dumplings.)

APPLE DUMPLINGS. Mix boiled mealy potatoes with flour into a paste; roll till it is scarcely a quarter of an inch in thickness. In each dumpling enclose a moderate-sized apple, which has been previously peeled and cored, and let them boil or roast for about an hour.

MACARONI. The macaroni is broken into pieces, boiled in water and milk, with butter, salt and sugar, till it is soft. It is eaten with stewed dried fruits or grated Parmesan cheese.

POLENTA. Mix maize semolina with cold water, stir into boiling salt and water, and boil for a few minutes. Serve with browned butter poured over it; those who like pungent flavors can add fried onions or grated horse-radish.

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*) As potatoes are, properly speaking, not a food which should be offered to invalids, they must be partaken of in moderation.

POTATO DUMPLINGS. Grate one pound of boiled potatoes, then mix them with about three quarters of a pint of milk, three eggs, and one spoonful of pure melted butter. Then add enough flour to make the paste sufficiently firm to form round dumplings, which must be boiled for fifteen minutes in salt and water. Regarding dumplings, see further "DIET MIXED."

Diet, Non-stimulating. (Fruit.)

FRUITS AND VEGETABLES, PRESERVING OF, about which there is so much difference of opinion, will be the subject of the following article, and will probably be found of general interest. Before the jars are used they should be carefully washed in hot soda and water, and then rinsed in water only.

Glass jars must be filled with vegetables only as far as the neck, but in tins the contents should not reach higher than about an inch and a half below the upper rim. The jars must then be filled up with water. Asparagus must be cut in equal lengths, and placed in the jars head downwards; the stems must only reach the neck of the jars.

Asparagus, young peas, and French beans must be put into boiling water, allowed to boil up a few times, and then to drain thoroughly before being placed in the tins or glasses.

Very juicy fruits, such as gooseberries, bilberries, fresh currants, cherries, etc., should be pressed into the jars with a small quantity of water until the former are quite full, including the neck. More water can be used to less juicy fruits.

The glass jars thus prepared must be closed, the tins soldered by an ironmonger, and set upright in a large saucepan of cold water, or in a pot specially made for the purpose, which may now be obtained at the ironmonger's. In the case of glass jars, the bottom of the saucepan should be covered with a napkin or cloth. The water in the saucepan must only reach up to the necks of the glasses, therefore only those of the same size must be placed together.

The saucepan must now be closed with the lid or a cloth, and put on to boil.

The cooking must be very slow and gradual; violent boiling will cause glass jars to crack.

When the water has boiled for the requisite length of time, the saucepan must be lifted from the fire, and the glasses allowed to cool gradually to prevent their bursting.

The time required for cooking is as follows: for asparagus one hour and a half, young peas in tins two hours and a half, young peas in glasses one hour and a quarter, carrots one hour and a quarter, French beans three quarters of an hour, mushrooms one hour and a half.

Time required for cooking fruits is as follows: ripe gooseberries fifteen minutes, unripe twenty to twenty-five minutes, strawberries ten to fifteen minutes, cherries fifteen to twenty minutes, currants fifteen to twenty minutes, bilberries twenty to twenty-five minutes, raspberries fifteen to twenty minutes, plums thirty to forty-five minutes, pears half an hour to one hour, apricots half an hour to three-quarters of an hour, peaches half an hour to three-quarters of an hour.

The time required for cooking is reckoned from the moment when the water in which the jars stand, begins to boil; a few minutes more or less are of no account. Fruit already stoned takes less time than when preserved with the stones; very juicy fruit must be cooked a shorter time, as it quickly clogs together; unripe fruit must be cooked longer, and it is advisable to scald it beforehand in boiling water to remove some of the acidity. If sugar is added, it should be placed in layers between the fruit.

STEWED FRUIT. Any sort of dried fruit must soak for at least two hours before it is cooked. It is best to thoroughly wash plums, apples, cherries, etc. Then place them in a clean earthenware vessel, cover them with water and let them stand all night. Next morning cook them slowly over a moderate fire till done. By this means a natural saccharine matter contained in the fruit reappears, and the addition of sugar is unnecessary.

TUTTI FRUTTI. Cover the bottom of a pie-dish with cooked cherries or damsons, or slices of raw orange, and make a crust like semolina pudding, only use half the amount of semolina so that it may be less stiff, and pour this over the fruit. To be eaten cold.

Refer also to "MUSHROOMS" and their preparation, at the end of this chapter, as they also belong to non-stimulating diet.

DIFFICULTY OF BREATHING IN CHILDREN may be caused by asthma, whooping cough, quinsey, diphtheria, spasm of the glottis, narrow chest, etc. See various articles on these subjects.

Digestion Impaired, see "STOMACH, WEAKENED."

DIGESTION, ORGANS OF. For illustrations and description, see Index.

Figure 105 shows the pharynx, gullet and the windpipe from behind. The gullet extends from the neck behind the windpipe, heart and lungs through an opening in the diaphragm to the stomach. For further information, see "CHEST AND ABDOMINAL CAVITY, ORGANS OF THE."

Pharynx, gullet, windpipe, etc. seen from behind.

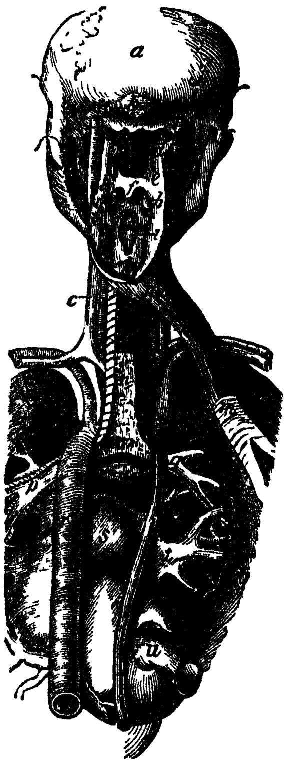


Fig. 105.

a) occipital bone. b) occipital foramen. c) main artery of the head. d) rear exit of the nasal cavity. e) ceptum narium. f) uvula with the soft palate. g) tongue seen through the pharyngeal cavity. h) tonsils. i) epiglottis, raised. k) larynx. l) pharyngeal ceptum. m) gullet. n) windpipe; division of the windpipe to the left. p) and into the right. q) bronchus.. r) aorta. s) heart. t) single veins. u) lower vena cava. v) lungs.

DIPHTHERIA is one of the most dreaded diseases, and demands a great many victims. According to Professor *Rose*, of Berlin, there have been in one single hospital in the infirmary Bethanien, one of the best conducted hospitals, in one single year no less than three hundred and forty cases of diphtheria in which two hundred and forty-one operations became necessary, and in which five-sixths of the patients died. With the Natural Method of Healing, the cure of this disease requires only a few days, and operations become therefore unnecessary; cases of death, alas, are also here recorded, but not by far at the same rate as with medical treatment.

This disease greatly resembles croup; but diphtheria is contagious and croup is not; the diphtheritic coating bears the characteristics of decay; in croup, however, a real membrane forms; people of any age are subject to the former, children only to croup; in the former swelling and suppuration of the sub-maxillary glands, but not in the latter. Thus various differences exist which are described in more detailed manner in the following.

This disease is, as already mentioned, very much like croup; also like thrush aphthae, and catarrhal inflammation of the throat. To be perfectly clear, we will give a concise and yet somewhat more circumstantial account of the respective distinguishing characteristics:

DIPHTHERIA OF THE PHARYNX, ANGINA. **The exudation (membraneous exudation), which is white or greyish white, is located in the**

mucous membrane, is therefore firmly attached and can be removed only with difficulty. The cure is affected with loss of substance and the formation of scars. Putrid smell.

CROUP. The excretion has a pale yellow color, clings very fast to the mucous membrane and is difficult to place. Cure takes place without loss of any substance. Barking cough, commencing suddenly, and generally at night.

CATARRHAL INFLAMMATION OF THE THROAT. White or yellowish point-like prominences, easily squeezed out and wiped off, frequently form on the tonsils.

APHTHÆ. Aphthæ are principally found on the edges and the under-surface at the point of the tongue, where croup never touches.

THRUSH. The oidium is white, is easily wiped away with a handkerchief, and makes its appearance in the whole of the throat.

SYMPTOMS OF DIPHTHERIA. General feeling of illness, depression, indifference, loss of appetite, followed by occasional vomiting, headache, delirium, high fever, shivering; heat, thirst, heaviness in the limbs, pressure in the pit of the stomach; next, pains in the throat when swallowing, inflammation and swelling of the tonsils and the gullet, and the appearance of a grey or whitish grey fungus-like coating, sometimes also brownish spots on the tonsils or the uvula spreading rapidly behind, above and below; if removed, the mucous membrane beneath it is seen to be an open, bloody or ulcerous place; further a peculiar unpleasant gangrenous smell, fetid discharge from the nose, dry, barking cough, etc. This disease appears independently or accompanied by other diseases, as: scarlatina, small pox, etc., it affects principally children, of from five to two years old, and appears more rarely in later years.

CAUSES.—Indigestible food and faulty diet, and consequent weakness in the digestive organs and of the nerves, spoiling children and effeminating them, and thus causing them to forfeit all the strength which should go towards resisting injurious and morbid influences; next, unhealthy, damp, dark dwelling places, often kept dirty, which are never aired, and overcrowded with people; and next too little exercise in the open air. Vaccination also from arm to arm, whereby the blood and the humors of healthy children are tainted or permanently poisoned, and the system of the little ones thus rendered susceptible to diseases of that description, is one of the causes of diphtheria. Lastly, infection, etc.

TREATMENT.—Separation of the affected from the healthy. The room must be cool and airy and therefore the windows constantly open and sometimes also the door. At a temperature of 46°, there need not be a fire in the room. A patient, with a fever upon him, cannot easily catch

cold, therefore he must be slightly covered, best a blanket, because it allows the morbid exhalations to pass through, while feather beds rather retain the morbid matters. This blanket, or better two of them, must daily be hung up in the open air several times, if possible in the sun; the floor of the room must be cleaned every day, but not be carpeted. The following simple but wonderfully effective treatment must, above all, be adopted:

Full steam-bath in bed and cool neck-compress. For the latter, a medium-sized towel is usually taken for children, dipped into (54° to 66°) water and wrung out moderately dry,—but it must be as wide as possible, so as to reach up to the ears and be put around the whole neck. The upper half of this wet compress is left without any woolen covering. Therefore the compress must not be too thin, and be kept on all the time the patient is in the pack. When he is not in his steam-bath, (66° to 72°) cool neck-compresses are constantly applied and changed when getting warm, with peevish children three-quarter steam-bath in bed and shoulder pack (duration of the bath three-quarters of an hour to one hour). Should the patient become restless the pack must be removed. If needful, this pack must be repeated two or three times within twenty-four hours. After it, a lukewarm (72° to 86°) full washing to be given. The higher the fever, the thicker and wetter the sheet for the steam-bath in bed. Moreover trunk and foot packs to be given. Both packs to be changed in high fever, *i. e.*, when they get hot—which a little child soon shows by its restlessness—according to requirement; when the fever is only moderate, about every two hours. Water should be taken into the mouth to absorb and loosen the exudations in the inflamed mucous membranes, etc. The patient must gargle several times during the hour, and with little children, injections made into the nose and throat with lukewarm (77°) water, which may be acidulated advantageously with lemon-juice, one-fifth of a lemon to a glass of water. If there is no ball-syringe, a well cleaned common syringe must be used, but it must be applied with a mild pressure. Besides fresh water, mixed with plenty of lemon-juice, must be drunk freely because firstly, it helps to quench the thirst, and, secondly, it soothes the heat and pain in the throat; the suppurating places are cleansed of their corrosive poisonous excretions, and, thirdly, the inward fever heat is mitigatetd and the injurious substances removed from the blood, nourishment is only given the patient when he asks for it. Non-stimulating, cool, semi-liquid food, buttermilk, apple-jam or other boiled and raw fruit. Egg-flip with sugar, oat or barley-gruel and similar decoctions. For constipation and for derivative purposes, cool (64° to 66°) enemata. In the evening a lukewarm half-bath (88° to 92°) for ten minutes. If the diphtheria is of a croup-like character, and the coating begins to cover the larynx, it is advisable, when a choking fit takes place, to put the child

into a tub containing warm water about five inches high, and to give affusions with cold water from the neck over the back. I have seen many a child saved by this heroic treatment. Also the hip-baths combined with wet rubbing mentioned by *Kuhne* and continual lavations of the abdomen are effective.

That injury may be done by physical application is proved by the following illustration: A homœopathic doctor applied inhalations of steam in diphtheria by causing the patient to inhale the steam of boiling water from a tub, which proceeding is generally fatal to life. The inhaled vapor is, by reason of its moist warmth, the very thing to promote the growth of fungi and effects only considerable aggravated respiration. The consequence of it is mostly aggravation of the croup and poisoning of the blood with carbonic acid (choking fits).

A Second Treatment. According to the patient's strength, a lukewarm (80°) soothing three-quarter pack morning and evening (if needful with a hot-water bottle, wrapped in a wet cloth, at the feet) and neck-compresses containing plenty of moisture, as above, to be kept on for an hour and a quarter, and followed by a lukewarm (90°) bath. For the rest, continual tepid (72°) stimulating calf-packs to be kept on about an hour and a half, and combined with (66° to 72°) cooling neck-compresses (duration half an hour) and tepid (68°) garglings or injections into the gums (also for half an hour). If there is fever, there are to be added (88°) soothing trunk or abdominal packs (duration one hour). This treatment must be continued through one or two nights, as it is just then, whilst the patient sleeps, that an aggravation of the disease takes place. Non-stimulating light food, lemonade (the juices of fruit, especially of lemon). Tepid (72°) enemata twice daily, contents eight to ten spoonfuls of water. When the disease has been overcome, it is advisable to give the patient a wet rubbing of the whole body every day for about a week, and a full pack or steam-bath in bed every other day.

Treatment by Massage. The swollen glands and muscles of the throat must be rubbed gently from the beginning in spite of the patient's great pain and the resistance offered to it by him, but with more pressure gradually in a downward direction for from two to four minutes with the fingers dipped previously in oil and water. At first this treatment is not applied to the swollen parts but to their neighborhood, and the manipulation of the affected places is gradually entered upon and to be repeated every half hour. The treatment by massage is always to be combined with the above applications of water.*)

*) This treatment by massage in diphtheria has been characterized by many as absolutely injurious because the friction of the tonsils, auricular salivary glands, muscles of the throat, and glands at the shoulders, all of them

At the beginning of the disease, when the throat and the tonsils begin to get inflamed and the first diphtheritic coating is discernible, frequently changed cool (59° to 66°) throat compresses are of excellent effect, and must not be done without. But it is not necessary to put the compress right round the whole neck, and thus to trouble the child at every renewal of the compress to raise its head, which would be every ten to fifteen minutes or oftener, because it takes that time in the beginning for the compress to get hot. I cause for this purpose a large pocket handkerchief, folded lengthways in four, to be placed behind the neck of the child, and have besides two compresses made, folded in eight, about three fingers wide and composed of old soft, white linen, long enough to cover the whole forepart of the neck and the tonsils (in other words: reaching from ear to ear, measured under the chin). A wash-hand basin or other basin with cool water is placed by the side of the bed, and both these compresses are dipped into it; they are wrung out, not too dry, and one of them is applied to the child's throat, so as to cover it, whilst its two ends are turned up at both sides of the tonsils, towards the ears, and then pinned together loosely with the dry cloth behind the neck. After some time, when it feels warm to the touch, it is unpinned and exchanged for the other compress lying ready in the basin, the dry cloth clapped over it as before and its ends tucked under the shirt. This process is continued till the compresses do not any longer get warm so quickly, which happens simultaneously with the decrease of fever and inflammation. When that is the case, *i. e.*, when the compresses take longer to get warm, a wet pocket-handkerchief, folded in four, is put round the child's whole neck in such a way that the ends reach in front up to the ears beyond the part where the tonsils are situated, and on which the diphtheric coating forms, so that the damp warmth may tell effectively upon the detachment of the coating and the excretionary process of the respective part of the skin, for which reason this compress is left on till it has become quite hot and begins to dry, which is within four or five hours or more. By this contrivance one has the advantage that the child is not obliged to raise its head every time a compress is put on. Let me emphasize once more: only at the outset, where there is considerable fever and violent inflammation of the throat and tonsils, are the wet cold compresses to be changed fre-

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swollen and exceedingly painful, causes the poison to be rubbed farther into the system. On the other hand, experience has taught over and over again that it is just these threatening swellings, which massage, combined with applications of water, calculated to stimulate excretion (as steam-baths, succeeded by packs, enemata, etc.) has caused to disappear in surprisingly short time. Notwithstanding this explanation, I do not advise treatment by massage in diphtheria to be undertaken without professional advice or, if applied, to be used only in the mildest manner possible, especially as the above applications of water are quite sufficient of themselves to cure the disease.

quently for the purpose of reducing and limiting this inflammation and the formation of the fungus-like covering. If these exudations, however, producing the diphtheric coating are embedded already in the mucous membranes of the throat to any considerable extent, or if fever and inflammation are moderated and entirely reduced, then frequently changed throat-compresses are absolutely injurious, because nothing else than damp warmth (stimulating compresses) is necessary to dissolve the mucus and effect a cure. This is an undoubted fact, and one of which any practising physician who has the opportunity of treating patients affected with diphtheria cannot help being convinced.*) It is always preferable in this disease to ask the advice of an efficient Natural Healer.

CASE OF DIPHTHERIA AND INTESTINAL INFLAMMATION CURED.

Dear Mr. Bilz!

Thanks to your valuable book, "The Natural Method of Healing," I was able in December last to completely cure my two children, aged five and ten years respectively, of diphtheria, and my wife of intestinal inflammation, without any subsequent injury. I appreciate this all the more, because my only son, a boy, seven years of age, died of diphtheria five years ago, in spite of the efforts of a number of medical men. I feel it my duty to express my heartfelt thanks to you, and hope that your invaluable work will find its way into every family.

Yours truly, *Carl Schmidt*, Kirn a. d. N.

CURE OF DIPHTHERIA.

by H. Canitz, of Berlin.

On the 23d of October, 18—, I was requested to pay the family of Mr. *Elsaetter*, of Chemnitz, a visit, their only son having sickened of diphtheria and been "given up" by the physicians who were treating him. Only an inhumane and heartless man could have resisted the urgent appeal, and although I knew that my opponents were on my track, I resolved to comply with the solicitation, and went there on Saturday at noon. The impression which the patient, who was but three years old, made upon me was certainly a very sad one, and justified the declaration of the physician on the day before, that the boy was doomed to die unless

*) It happens sometimes, as every practitioner knows, who has had different forms of diphtheria under his treatment, that, notwithstanding reduced fever and profuse perspiration, the diphtheritic coating which exists in masses and covers the entire throat and jaws cannot be dissolved and removed whilst the pain in swallowing increases, as sometimes happens with scrofulous children. It is then that the highest degree of moist warmth is required.

a miracle was wrought, while the second medical man who had been called in said nothing could be done, the treatment hitherto had been the very best possible, but there was no help. Inhalations of chloral vapors and chlorinated soda had been administered since Monday, and a blood-stained ichorous humor now flowed from his nose; his jaw was covered over and over with a diphtheritic coating, even the gums and the soft parts of the mouth were affected with it; the glands had considerably swollen, and entire apathy had taken hold of the patient. As he had been unable to take anything for days, his weakness was extreme, and he was in fact more dead than alive. The family had abandoned all hope of preserving the child, but still would not leave anything undone that offered a chance of life for their only son. My hope was very slight, too. But the child was still alive—and where there is life, there is hope; at the very least I could procure the sufferer great relief. To effect that, I gave advice to the best of my ability. All the different manipulations were proceeded with, but very gently, so as not to break the delicate thread of life. First a (90°) half-bath; after half an hour's interval, throat-, body- and leg-packs, renewed according to necessity; numerous injections of water (72°) into the mouth and (80°) into the nose with a little ball-syringe: the windows were to be kept open; these were the orders for the first day. If the patient was still alive on Sunday a bath was to be given early, and all the other directions as to packs and injections strictly carried out. Nothing was prescribed in respect of diet, as the patient showed no inclination to take anything, in fact, could not get anything into his mouth or throat; the attempt only was to be made to instil some fresh pure water or juice of fruit. Sunday found the boy still living, and, although no great improvement had taken place, still time was gained and a bath in the evening was added to that in the morning, and a small enema (66°) prescribed mornings and evenings. On Monday a quantity of diphtheritic coating in form of felt-like little lumps was by the injections removed from the mouth, and that detached itself further and in greater quantities during the next days. The boy's condition grew a little better. This was proved by the possibility of giving him a little stewed fruit. On Wednesday commenced the hope for his recovery, since the flow from the nose had now entirely ceased, and only after injections gray masses of the coating came from mouth and nose; also appetite was felt and appeased with semi-liquid food and with fruit. On Saturday, a week after beginning this treatment, the boy was, comparatively speaking, well and cheerful, and on the Monday following I paid my last visit to the convalescent, only recommending his mother to give him mornings and evenings an 88° half-bath, to apply

a two hours' pack, morning, afternoon and night, to keep the same diet, and also to go on regularly with the injections all the week.

A weakly boy, aged ten years, the son of Mr. *Gandes*, merchant, of Gartenstrasse, Chemnitz, and who was very ill with diphtheria, was another patient during March. The parents had already made themselves familiar with the dreadful idea of losing him, and had given up all hope. The patient could only breathe with his mouth wide open, and could neither speak nor swallow. The entire throat and even the soft gums were covered all over with a diphtheritic coating, and the glands were swollen to such a degree as to make breathing all but impossible, and the poor boy was struggling for life with all his power. The impression produced by the sufferer was of a most distressing kind; injections into throat and nose by means of a small ball-syringe, baths and packs had such a rapid effect, and considering the aggravated nature of the nose were so satisfactory and all-sufficient that as early as the third day the coating had all but disappeared and his vital force proclaimed its victory by a mild beneficial perspiration. His condition improved from day to day, and after the lapse of a week the boy was in excellent health.

CURE OF DIPHTHERIA AND SCALD-HEAD.

By Edmund Schneckenberg, Reitzenhain Sanatorium.

Mr. *Henry R.....r*, Town Councillor in Probershau, fetched me one evening to go and see his son, aged five years, who was near suffocation. I found him afflicted with diphtheria and very high fever. A properly applied bath of 88°, combined with vigorous friction of the legs and gentle affusions of the body quickly brought relief to his difficulty of breathing. With the natural treatment: diet, baths, body- and throat-packs, injections into the intestines and mouth, the dangerous illness was completely disposed of in five days. Another child of the family sickened of diphtheria a few days afterwards, and was successfully treated by the father with the Natural Method of Healing. It was now the turn of the third child, two years old, to be ill. Its entire head was covered with scabs, the head itself very large, its stomach inflated, arms and legs very weak. It had been treated to plenty of embrocations and salves, the last time in the beginning of November. The doctor had succeeded first rate in rubbing away the eruption within three days, but had not the faintest idea that the child would be in consequence afflicted with a disease almost fatal. It was only with the reappearance of the eruption that the child got better. The untrained villager soon saw, what no trained doctor could see, that an eruption could never be rubbed into the body without the whole system suffering from it. He lost faith from

that time in his infallible remedy. With correct diet and attention to cutaneous action by body and calf-packs, the eruption went away in a few weeks; head and body assumed their normal appearance, and arms and bones increased in bone and flesh.

ILLNESS AND DEATH OF PRINCE WALDEMAR OF PRUSSIA.

Some time elapsed since death had reaped a rich harvest among happy men in any of Germany's reigning houses, until, a few years ago, the German nation saw him enter the Imperial house of Germany itself. A prince, heir presumptive to the throne, who, wealthy and strong, fresh and happy, was watched over and guarded by affectionate parents and careful medical wisdom, sickened and died at the age of twelve years.

The physicians who treated the deceased prince, made the following report on the course of the disease:

"His Royal Highness, Prince *Waldemar* of Prussia, sickened early on Monday, April 24, 1879, of an inflammation of the throat manifesting itself by a swelling of the glands and the soft gums, and with a diphtheritic coating on the right tonsil. The fever, till then trifling, increased during the evening, simultaneously with the swelling in the throat. After a four hours' uninterrupted sleep, a slight decrease of the fever was perceptible on the morning of the 25th; the local affection, however, had not diminished, and in spite of energetic and continued application of remedies the coating spread farther on the soft gum and extended to the left tonsil. The tissues of the lower jaw began to swell on the 25th, and caused an aggravation of the difficulty of swallowing so that even now only a very small quantity of liquid food could be taken. Local and inward remedies were applied without interruption. After a sleep of nearly five hours in the night of the 25th, no diminution in the swelling of the throat and in the coating was noticeable, and the difficulty of swallowing was correspondingly great. The diphtheritic coating, hitherto but thin, became thicker in the course of the day, and showed as a result of the remedies employed for gargling only at the upper edge a beginning of detachment from the mucous membrane. Food was rejected, the increase of fever in the evening was less marked than on the previous day. The space between the tonsils afforded sufficient admission of air. The difficulty of breathing towards midnight, whilst the patient snored in his sleep, was very striking; it passed temporarily away, however, when the patient awoke, but came on again in his sleep, so that between one and two o'clock preparations were made for tracheotomy. After two o'clock, however, his breath gained greater freedom (twenty-

eight inspirations to the minute), and in every part of the thorax and back the normal sound attending breathing was heard. The voice also having become louder and not being hoarse, an extension of diphtheria to the larynx did not appear to be imminent, and the necessity for an operation was consequently postponed. At two o'clock in the morning of the 27th the patient began to be delirious, and so remained with good, regular breathing and tolerably strong pulse, until death supervened, owing to syncope of the heart quite suddenly at half-past three o'clock, attended with some convulsive movements and with regular breathing.

Berlin, April 27, 1879.

v. Langenbeck, Surgeon-General. Dr. *Wegner*, Surgeon-General.

Dr. *Schrader*, Surgeon-Major."

Several notices in the newspapers preceded this report, stating that the prince had been out of sorts and indisposed several days before the outbreak of the disease, that at an exhibition, which he visited with his parents, he had not displayed his wonted attention. These communications confirm what I said in No. 12 of last year, and in No. 1 of this year, in the "Zeitschrift," *i. e.*, that diphtheria is not a local affection of the throat, and that the inflammation of the tonsils and the diphtheria coating on them is only a characteristic symptom of a malady which has already existed for some time previously.

The report of the three physicians and the result of the patient's treatment afford us once more a clear insight into the—worthlessness of allopathy and its remedies. Notwithstanding the energetic and continual application of remedies—and although the application of local and inward remedies suffered no interruption, and though surely the three signatories watched, from the first moment when the serene patient fell ill, to his last breath every expression and inspiration, noted every feverish movement, every change of pulse, and though they had at their disposal all and everything that could bring salvation to the sufferer; yet, an illness beginning with slight fever, inflammation of the throat, being characterized by redness and swelling of the tonsils and the soft gums, by the formation of a diphtheritic coating on the right tonsil—a local symptom, by the bye, indicative of diphtheria in every case at this stage—had a fatal issue. Notwithstanding the energetic and continual local and internal remedies—a great pity that they did not enumerate them—the trifling fever and swelling of the throat increased and the coating extended more to the soft gums and to the left tonsil—so runs the report. Was not this a striking proof that these gentlemen were on the entirely wrong track with their treatment? Should this observation not have forced

the conviction upon them that under their treatment the disease, commencing lightly, could not but assume a more and more dangerous character? Even on the first day, much more so on the second, the three gentlemen ought to have said to themselves that their favorite remedies had not improved the course of the disease, but, on the contrary, had only aggravated it. Energetically and continually, nevertheless, with local and internal remedies, they ill-treat the throat and the digestive apparatus and belabor the vitality of the nerves and of the blood to remove the fever and the coating, as if the removal of these symptoms could possibly cure the real disease. They registered a small success for the nostrum which they used for garglings by noticing the commencement of a slight detachment from the mucous membrane at the gum of the coating, which was at first thin, but, however, in the course of the day, became thicker; nor was the fever so high on the evening of the 26th as it had been the previous day—for all that, a fatal ending!

That is exactly where it is! They destroy the vital force by antipyretic remedies, they lay it prostrate so as to be unable in the end to manage even a fever, but they leave the causes which produce this fever entirely untouched: these are only aggravated by the medicines which are foreign substances in the body, and thus the vital power is destroyed. The sufferer, begging for help and sorely needing it, gets a slap in his mouth with corrosives and poisons, and is forced to be silent, but relief is not afforded him. Whatever is the use if the coating be painted and burnt away or obliterated by corrosives, when by so doing the cauterized tissues are rendered only more fit to receive the gangrenous masses directly into the vessels which have been destroyed by painting corrosives and gargling, and thus infallibly pave the way for death.

DIPHTHERIA AND ANTITOXINE.

Dr. *Schulze* writes as follows in the "Journal of Popular Hygiene":

"No age has been so rich in inventions and discoveries as ours, and it is worth while to investigate the causes of this phenomenon. I fear that the source of most discoveries has not been altogether an unsullied one, and that they have arisen in great measure from mere ambition, or, worse still, from desire of gain. Or shall we, on the other hand, designate the guiding motive by the well-sounding term 'Love of Truth'? During the last two decades an irresistible tendency has asserted itself in medical science, constantly to seek out new remedies, many of which enjoy only a brief existence and are again replaced by newer ones. The progress which has been made in chemistry, physiology, and especially in microscopical research, has given rise to a host of new ideas, resulting

in a new system of therapeutics, based on the hypothesis that diseases are caused by organisms, and the modus operandi of which consists in the introduction into the circulation of the new remedies by means of inoculation and injections. It is a question, however, how far these so-called remedies have stood the test of experience and proved really serviceable to humanity or even to the animal world. I would remind the reader of the system of inoculation against hydrophobia introduced by Professor *Pasteur* in France, the success of which has been doubted by his own countrymen, and which has met with no favor in this country. Also of the claim of the same man to have discovered a remedy for anthrax in inoculation, a claim which was examined and rejected by a commission appointed by the Prussian Government in the district of Mansfeld, where the disease was epidemic. I would refer once more to the pernicious tuberculin injections of *Koch*, which have resulted in a complete fiasco, in spite of the manner in which they were lauded to the skies and trumpeted forth to the world, but which continue to be employed by credulous fanatics, and are still puffed in medical periodicals. I admit that sufferers from the dry cough, which forms the earliest stage of tuberculosis of the lungs, have recovered after inoculations with tuberculin; but are we justified in drawing the conclusion that these patients owe their recovery to the inoculations, in view of the fact that equally favorable results have been obtained by a strictly regulated manner of life, by the removal of the patient to a healthier house and bed-room, and by breathing-exercises carried out in pure and mild air?

And now a new discovery has lately been brought to light, viz., the cure of diphtheria by injecting the serum of animals rendered immune to the disease (*i. e.*, protected from contracting it) by inoculation with the lymph of other animals which have been attacked by it.

There has been no little jubilation in the newspapers over this discovery, and the high-sounding title of Antitoxine has been applied to the remedy, though men are by no means convinced as yet that the virtues which have been attributed to it will be confirmed by further experience. Since, however, according to the discoverer, the remedy is only effective in the early stages of the disease, the question arises whether all the cases which have been announced as cured were really of diphtheritic character. I am very frequently sent for by anxious parents who have noticed grayish-white patches on their children's tonsils, and in most cases I have been able to comfort them with the assurance that there were no symptoms of diphtheria. I have even known cases which have been diagnosed by physicians as diphtheritic, and notified as such to the police, which, however, were not cases of diphtheria at all. While on this subject I must mention a fact which, I am sorry to say, does not redound to the

credit of the medical profession, viz., that it has been the custom of late, at any rate among young doctors, to exaggerate the gravity of the disease when speaking to the patient's family, a custom which I cannot approve of, and can only account for as the result of the desire on the part of tyros to establish for themselves a reputation as saviours of life.

In the reports of experiments with antitoxine it is stated that the remedy is effective only at the beginning of the disease. What, however, is meant by the beginning of diphtheria? No other disease approaches so treacherously and breaks out so suddenly in its fully characteristic developed form, before the least suspicion has been entertained of the presence of the danger. How often are we not informed by parents that their children are at one moment playing gaily, and then suddenly lose all inclination for play, and complain of indisposition and pain in the throat, and that then for the first time they observe patches on the tonsils and gums of the children. But since the patches were observed as soon as the children complained of feeling ill, the disease must already have been developed. Is this moment then to be considered the beginning of the disease, or have other phenomena been discovered on the apparently healthy individuals indicating the commencement of diphtheria?

It is now more than half a year since I first heard of the alleged curative virtues of antitoxine in cases of diphtheria, and yet we are still in the experimental stage. It might have been supposed that, diphtheria being a disease of frequent occurrence, especially in Berlin, some definite conclusion would long since have been arrived at, for this continual experimenting tends to produce a feeling of scepticism in regard to the "beneficient discovery."

Among the criers up of the new system must be included the committee formed for the object of making antitoxine accessible to the poor. In their appeal attention is drawn to the high price of the remedy, the necessary dose costing seven marks, which sum has even been demanded from doctors by an enterprising apothecary in a circular. I would suggest to the benevolent committee that they should apply direct to the laboratory where the antitoxine is prepared, which, I am informed on sound authority, makes a handsome profit by selling the remedy for 2 M., whereas the apothecary is not satisfied with less than 200% profit in addition."

See also "DIPHTHERIA, ITS ORIGIN AND TREATMENT."

A CASE OF DEATH THROUGH ANTITOXINE,

which at the time was reported in all the papers, and which shows how dangerous the administration of serum may be in many cases, may find a place here:

The "Vossische Zeitung" had the following announcement in its issue of the 9th of April:

Our dear son *Ernest*, aged one year and a half, died yesterday evening at six o'clock, in the midst of perfect health, from the effects of an injection of *Behring's* antitoxine, administered for the purpose of procuring immunity from diphtheria.

The undersigned request silent sympathy.

Dr. med. *Langerhans.*
Berlin, 8. April, 1896. Mrs. *Langerhans.*

It need hardly be said that the above deeply affecting case, in which the child of a well known medical man, in the midst of perfect health, fell a victim to an injection of antitoxine, will afford food for reflection to sensible people, especially in regard to the administration of antitoxine as a preventative.

The Berliner Lokal-Anzeiger writes as follows concerning this case:

Dr. *Robert Langerhans*, Professor at the Moabit Hospital, son of the chairman of the town council, Dr. *Langerhans*, has just been visited by a terrible calamity. He has lost his little boy, aged one and three-quarter years, who died immediately after an injection of *Behring's* antitoxine. The circumstances, as far as we have ascertained them, are as follows: The Professor's cook was suddenly seized with violent pains in the throat, and was sent to the diphtheritic department of the Moabit Hospital. On the advice of his colleagues, Prof. *Langerhans*, who had lost two of his children the year before, determined to secure his little boy against infection by an injection of antitoxine on the following day. Having procured a supply of antitoxine from the apothecary at the hospital, he administered the injection towards evening. In an instant the boy was a corpse. A sudden failure of the heart put an end to his life. Dr. *Max Asch*, of Charlottenburg, made the following remarks: "Are we to see in the tragic fate which has befallen the family of Prof. *Langerhans* only an exceptionally unfortunate accident, or are there reasons for supposing that a casual connection exists between the death of the child and the previous injection of *Behring's* antitoxine? Are there other cases within our knowledge tending to show that injections of antitoxine are dangerous to life?"

An article in the February number of the "Monthly Therapeutical Journal," edited by Prof. *Liebreich*, setting down simply and dispassionately the results of the experience gained up to the present affords us some instructive information on this point. In the first place we find a list of cases in which the administration of antitoxine has been followed by severe illness, often lasting for weeks and months. The most notorious

of these cases is one reported by Dr. *Pistor* in Berlin, and which happened to his own daughter. The latter, a girl of seven, was treated, on account of inflammation of the throat, which it was afterwards proved was not diphtheritic at all, with one injection of antitoxine, and this was speedily followed by severe and protracted illness, confining her to her room for three months. Dr. *Variot*, of Paris, who has perhaps had the widest experience in this matter, expressly raises a warning against the administration of the antitoxine for preventive purposes, the danger attending such administration being too great. Not only, however, has disease been known to result from the injections in question, but there have been cases in which their administration to healthy children for preventive purposes has been followed by death within a few days.

The experiences here brought to light ought to be sufficient to refute the assertion, so constantly and publicly repeated in interested quarters (by interested parties) that the application of antitoxine is unattended with danger. On the contrary, it must be emphatically pointed out that there are few remedies out of the vast number known to medical science the use of which has so often led to disastrous results as this much vaunted antitoxine.

The results hitherto made known not only teach that the treatment of diphtheria by antitoxine is attended with considerable danger to the patient, but they prove in a manner which is daily becoming more and more conclusive that the immunity against disease which the administration of antitoxine is supposed to confer on healthy individuals is illusory. Our experience so far shows, therefore, that the practice of inoculation for preventive purposes must be condemned as useless and dangerous.

Referring once more to the case of Dr. *Langerhans'* little boy, I will add a few words of my wife's, who, though not possessing the advantages of a university education like physicians and professors, nevertheless has plenty of common sense. She says: "One feels tempted to regard this case as a dispensation of Providence intended to show clearly to the believers in inoculation that these and all other inoculations are unnatural and presumptuous errors of the age, especially as Professor *Langerhans* had shortly before been questioned by a Government Commission as to his opinion of the value or non-value of vaccination, and had spoken warmly in favor of it. In consequence of this, compulsory vaccination, against which thousands of petitions had been for many years sent to the Reichstag, remained in force."*)

***) However much our over-clever atheists may make merry over the idea of messages from above, the matter cannot be disposed of in this easy fashion. I would remind such people that there are more things in Heaven and Earth than are dreamed of in their philosophy.**

We refer the reader to the article on VACCINATION.

DIPSOMANIA results from immoderate indulgence in brandy, strong beer, wine, etc. When constantly indulged in, intoxicants give rise to great disturbances in the system, and, by reason of the irritation which they produce in the mucous membranes of the mouth, throat and stomach, engender chronic gastric catarrh. Nutrition and strength are impaired, and degeneration and diseases of the liver are also frequently met with.

Mental derangement, muscular tremors, unsteady gait, weakness of sight, indistinct utterances betraying a dulled mind, are further symptoms. The patient lapses into a condition of mania, in which he is tortured by the most horrible delusions.

Most confirmed drunkards die of general dropsy, arising from atrophy of the liver, and fatty degeneration of the heart.

TREATMENT FOR PERSONS IN A STATE OF INTOXICATION. Cold compresses should be applied round the head and frequently changed. If at the same time cool compresses can be applied to the stomach, they will help to remove the effects of intoxication.

If there be inclination to vomit, water must be drunk in large quantities till the sickness is over.

The windows of the bedroom should be left wide open. All feather pillows should be removed and straw, etc., substituted.

To avoid intoxication the strictest discipline and the greatest self-command are required. If the former cannot be carried out at home, persons subject to habitual intoxication must be lodged in some institution or "home" for inebriates. In every town there ought to be refuges or institutions where dipsomaniacs can be received and treated. Many doctors give remedies, calculated to excite nausea, *e. g.*, tartar emetic or ipecacuanha, put into the brandy in small quantities, or they mix brandy with all food and drink. Other people again try remedies which are ruffed in the papers; these are generally only humbug.

We add a few particulars about brandy, etc., and the consequences of its consumption:

Brandy contains from 30% to 50% of alcohol, wine from 7% to 20%, beer from 2% to 4%, but English beer nearly 8%.

But alcohol is a most dangerous poison, see "POISONING BY ALCOHOL." One of the saddest signs of our time is the increase of drunkenness, and the physical, mental and moral degeneration associated with it. According to Dr. *Taquet* the number of deaths in France in the year 1873 showed an increase of 51,523 over that in the previous year, while the decrease in the number of births during the same period amounted to

19,636, and the last census is said to have revealed the existence among the population of that country of 39,593 idiots and cretins. Dr. *Taquet* ascribes this distressing phenomenon to dipsomania, which, as is known, is transmitted from generation to generation, and brings in its train mental derangement, epilepsy, inclination to crime, and loss of moral sense. American, English and German physicians are thoroughly agreed on this point.

The following observations may find a place here: Take care not to let the consumption of alcoholic drinks grow into a habit! The habit will become a vice! The confirmed brandy drinker persuades himself that this beverage is essential to his life; he regards brandy to be the chief solace in trouble, the real dispeller of care, the source of all bodily strength, the only joy in this vale of tears, and therefore he thinks he must sacrifice everything else to procure this priceless boon. All sorts of bodily troubles, it is true, soon make their appearance in consequence of its use, but instead of now recognizing the baneful character of his cherished beverage, he considers it the only effective remedy for his ailments, and drinks more than ever. He drinks to restore his diminished strength. Brandy is undoubtedly an effective stimulant. Before long, however, the indulgence in alcohol gives rise to a bodily condition in which the performance of efficient work becomes impossible. He neglects his duties or performs them perfunctorily. This state of things calls forth blame and reproaches from others, and then he thinks he must take to the bottle, "just to wash down the vexation," and so he goes on from bad to worse. This continued tippling, it is true, consumes a great part of the weekly wage; the home goes to the dogs; wife and children are often in dire want of the necessary food and raiment,—but the habit has now become inveterate. Drink he must have, even if everything else goes to rack and ruin.

But brandy drinking not only ruins a man financially, but morally and bodily as well. We have already mentioned that the continual excessive consumption of brandy very soon gives rise to bodily ailments, which is very natural. Considered as an article of consumption there is a great difference between alcohol and ordinary food and drink. The latter, after being digested in the stomach, are converted into blood, and as the life is in the blood, they give strength and nourishment to the system. But alcohol passes through the body without changing its own nature; it enters the blood as brandy and as such remains in it. In consequence of the introduction of alcohol into the system, the blood courses quicker through the veins; it is even violently urged through them. That is the reason why we feel a sudden heat when we drink brandy. Now it is well known that the brain is traversed by a number of veins, not perceptible to the

naked eye. The blood, which has been heated by brandy, naturally enters these tiny blood-vessels, which are in consequence disproportionately distended, and the result is disturbance in the functions of the brain, the seat of intelligence. But the more frequently these disturbances occur, the more the mind gets weakened. Every habitual drunkard gives sufficient proof of it by his actions and behavior. The tippler gets more and more clumsy and incapable of ordinary mental activity. The desire for drink finally predominates over all other desires, and all his thoughts and efforts are directed to procuring this poisonous and destructive irritant.

Under these circumstances it is no wonder that the confirmed drunkard deteriorates morally more and more, and finally lapses into absolute degradation and wretchedness. This picture is by no means overdrawn. It accurately reflects the sad conditions of our time. May it help to turn the drunkard, who is not yet past redemption, from his downward path.

"Close half the public houses," says Dr. *Sonderegger*, "and you close half the hospitals, madhouses, workhouses and prisons." If a man wants to conquer a passion*) like dipsomania, smoking, snuff-taking, etc., he must if possible do it at one stroke, and must never indulge in it again, at any rate until the victory is complete, as he will otherwise again fall an easy victim to it. We repeat once more that self-mastery is necessary to shake off a habit. The drunkard who wishes to reform should proceed on some morning when he has bitterly reproached himself or been reproached by his friends or family; let him make the firm resolve not to touch a drop of spirits during the day, however strong the craving may be. Let him make the same firm resolve the next morning and strengthen himself in it by exclaiming: "I have at least passed one day without drinking spirits; I have thus conquered my passion, I will do the same again to-day." Let him do this every morning; he will find a joy in being able to say: "Another day has already gone by without my having touched spirits," till in the end he has gained a lasting victory.

His painful condition will be rendered more bearable by the daily application of a (73°) wet rubbing of the whole body, and steam-bath in bed, or steam-bath followed by a pack and bath, or simply a douche as well as a body-compress at night. Dear reader, if you are a drunkard it is a terrible thing for your family, since they must feel ashamed of you, instead of being proud to be seen in your society. Do not remain any longer a social outcast; do not go about an object of derision and mockery to the boys in the street, but turn back from the path, which will only bring ruin to the health and existence of your family.

***) To enable a man to conquer more easily passions of any description, he must first have adopted a vegetarian diet.**

A CASE OF DIPSOMANIA, ACUTE ARTICULAR

Cured in the Berlin Institute for the treatment of diseases by the Natural Method of Healing by H. Kanitz.

It has been repeatedly proved that the Natural Method of Healing is the most suitable treatment for the sure and speedy cure of acute articular rheumatism without any malignant complications (pericarditis) and distressing sequel (organic defects of the heart) supervening. Our journal has reported various instances in the course of the year, and I would have refrained from recurring to the subject now, were it not that special reasons compel me to do so.

It has unfortunately frequently been observed that patients suffering from rheumatism or gout, not being able to find relief from their pains by the use of salicylic acid, ichthyol, chloroform, oleum hyoscyami infusum, or other medicines, try to find this relief by resorting to subcutaneous injections of morphia. Even when they succeed in deadening the pain, which is by no means always the case, the frequent injections, ever increasing in quantity, soon become such a necessity that they are no longer able to discontinue them. That which originally appeared to be a benefit soon becomes a curse; what gave relief at first changes before long into a galling chain; what promised them a cure in the beginning leads them presently into dreadful slavery. If the craving be not at once resisted, it becomes an uncontrollable passion, the morphia habit. How much misery, woe and suffering this word implies! He who has watched its slaves, gains the conviction that morphia is a remedy of the evil one, fair to look upon in the beginning, grotesque in its course, and annihilating in the end. Yes, annihilating! Both bodily and mental powers are laid prostrate under the influence of this remedy. However strenuously the victim of morphia may resist the craving, he cannot escape from it with his own unaided strength; there is no such thing for him as self-deliberation. Help must come from without. Institutions for patients of this description have been founded and established by speculators, and there, as is always the case with medicinal treatment, one evil is removed by substituting another. These institutions proceed on the principle of gradually reducing the dose of morphia, and increasing the intervals between the doses until at last, after a lapse of months and years, and with the aid of other drugs, the craving ceases. Danger, too, is to be feared if the supply of morphia be stopped at once.

Various observations and experiences in cases where the method of "gradually breaking a patient off a habit" has been followed, though with poor results, have convinced me that quick, decided action is the safest and most effectual remedy. Some years ago I was asked by a notorious and

inveterate drunkard after a public lecture, what would become of a drunkard at last, and whether there was a remedy for dipsomania. I depicted in the most vivid colors the misery to which a drunkard would be reduced, and told him that he might expect a certain cure from treatment, by wet rubbing, packs, etc., and the most stringent renunciation of spirits. And the man did not touch another drop of brandy from that hour. I often met him afterwards; he had become a happy man and an enthusiastic votary of the Natural Method of Healing, to which he owed his complete health, his strength, his assured position in life and the return of a happy family existence.

I have been able to observe several similar cases, and am convinced that with a steady will, and with the application of the means offered by the Natural Method of Healing, every craving is curable. A patient, who was brought to my institution suffering from severe articular rheumatism, had been afflicted, at the same time, for the last twelve months, with habitual morphinism. He had been in the habit of taking six injections daily in order to obtain relief from the rheumatism from which he had suffered for years, and which had been treated medicinally without any result. The habit had obtained such a hold over him that he declared he could not exist without morphia. Although the patient suffered most excruciating agonies, there could of course be no question as to morphia-injections in my institution. For the raging pains, compresses, steam-jars or steam compresses, were applied; the heart was protected by chest-compresses, trunk-packs being also ordered. A craving for morphia came on next morning; the patient complained that he felt like dying, and that his condition was horrible. Might not at least one injection be given to relieve his pain? Was there no danger in the sudden withdrawal of this remedy, especially as rheumatism had to be reckoned with also? But it was not to be. The danger had to be avoided by other means. If nature could be compelled to develop her strength and activity in a certain given direction, and thus be diverted from the momentary impulse, to seek satisfaction in the gratification of a want to which she had been accustumed—if a change could be brought about in the condition of the nerves by adopting a short derivative treatment, thus effecting an entire change in the patient's condition, might it not be possible in that case to overcome the "craving" without injurious effect? Just as a person can at once destroy an inordinate longing for a cigar or a pipe by putting a dried plum in his mouth, and can thus break himself off the habit of smoking, and, on the same principle, there must be a way by derivative remedies, and, by bringing about a change in the patient's constitution, to remove other noxious practices without difficulty. In this case I considered the most appropriate means to be to force nature in the production of perspiration, nor was I mistaken

in my calculation. As soon as the steam-bath in bed, which I had ordered, began to produce its effect, rest and satisfaction were the result, the craving for morphia vanished. When next morning the same "mortal misery" manifested itself, the same counteracting remedy was applied, and with the same result—and when his rheumatism permitted the regular employment of the steam-baths in bed, when the patient, on the sixth day, was able to have box foot-steam-baths, "craving" for morphia vanished, he improved and grew stronger every day, and after twenty-two days was able to leave the institution perfectly cured.

After this experience, I am certain that it is in the power of the Natural Method of Healing to make short work of the "morphia habit."

Diseases, Hereditary. See "PREDISPOSITION."

DISEASES, HOW TO AVOID, or how to be protected from them. The body ought to be preserved and taken care of like a valuable garment or other precious possesion. The garment will wear well in proportion as it is properly used. The same is the case with our body. To take care of it, however, does not mean to preserve it from exertion, wind and weather. No! that would mean to coddle and to effeminate and injure it. To preserve the body, so as to keep it long without the necessity of repairing it, the following conditions are necessary: plenty of out-of-door exercise, sleeping with the windows open, daily attention to the action of the skin, regular action of the bowels (using enemata, if necessary), avoidance or limitation of the consumption of stimulating food and drink, an active life, the practice of curative gymnastics and adequate rest. See also "HARDENING."

Double care must be bestowed on a dress, which is not made of strong, durable material; the same holds good with a person not constitutionally strong and with a predisposition to disease. For the rest, see "HYGIENE."

As already mentioned, curative gymnastics (especially the fourth group) must be practiced by those whose occupation only involves parts of the body.

Diseases, How to Protect From. See Index.

Diseases, How and by What Method to Treat, see Index.

Diseases Resulting From Confinement, see "WOMEN, DISEASES OF."

Diseases, Treatment for all Kinds of, see "BAD HEALTH."

DISLOCATIONS may occur in any joints; most often at the shoulder-joints, most rarely at the root of the foot or hand. The most painful dislocations are occasioned by a knock, push or fall, etc. They develop into an inflammatory tumor. The connected bones of a joint are forced out

of their right position and only meet partially. If it is impossible to make the usual movements with the joint, and if every attempt at motion fails, a doctor or surgeon must be called in to reduce the dislocation. If an unskilled person wishes to perform this operation himself, he must first turn the dislocated limb with energy into its normal direction, using some force if necessary, and then, when it has become movable, try to get it quickly into its proper place. The limb must afterwards be allowed to rest in a raised position. It is often requisite to apply an immovable bandage, as in a fracture of a bone.

Treatment by Massage. When the reduction has been successfully performed, a soothing compress of an hour's duration, or as long as it can be comfortably borne, should be applied, the affected part should be massaged, the strokes being made gently at first and more vigorously as the pain subsides and towards the center of the body. With excessive swelling and great pain, the strokes must be made, as in sprains, beginning on the adjoining healthy tissue, in order to empty the blood and lymphatic vessels, and to absorb the contents of the tumor. The swelling, tension and pain will diminish in consequence, and then, and not till then, should the massage be vigorously performed. If the swelling increases and pain sets in more violently, it is a proof that the massage has been performed too energetically. When the massage is finished, the soothing compress must be applied once more. For further treatment, see "Sprains."

DISINFECTION. By disinfection is understood the destruction or sterilization of bacteria or germs of disease. Ever since bacilli and bacteria were discovered, and medical men asserted that they were the cause of various diseases, ways and means for their destruction have been diligently sought after, and the various measures taken to destroy disease germs are called disinfection.

Disinfection may be applied to the whole or to any one part of the human body, to clothing and dwellings (rooms, passages, closets, etc.), streets, etc.

Two chief means are employed to destroy bacteria, viz:

Firstly, various chemicals in proper solutions.

Secondly, heat.

Many chemicals have been tried with more or less success, and we append the names of the principal ones: acid of benzoin, boracic acid, carbolic acid, chromic acid, chlorine, iodine, camphor, salicylic acid, hydrochloric acid, corrosive sublimate.

The best known and most extensively used are boracic acid, carbolic acid, salicylic acid and sublimate dissolved in water, and chlorine in a dry state. The strength of these solutions varies greatly. Of boracic acid a

4 per cent. solution, of carbolic acid from 2 per cent to 3 per cent., of salicylic acid 3 per cent., but only one part of sublimate to one thousand parts of water suffices to destroy bacteria. These solutions are used to cleanse and to treat wounds, as well as to disinfect the hands and other parts of the body.

Chlorine, or rather chloride of lime, is generally used to disinfect dwellings. It is put in earthenware vessels and vaporizes gradually, and the gas it emits is supposed to destroy all disease germs in the room.

Heat is the second means used for disinfection. It is employed either in the form of hot air, boiling water, or in the shape of steam. By means of these linen, clothing, beds and surgical instruments are generally disinfected. The least satisfactory of these is hot air, because it does not penetrate into and through linen and clothing as it should do to be thoroughly effective, and more particularly as too great a degree of heat is necessary to destroy the micro-organisms.

Boiling water or steam jets such as are used in all public disinfection establishments, are the most satisfactory of all. The steam finds its way into the very thickest folds of a garment.

This is, in short the *modus operandi* of disinfection as practised and recommended by medical men.

What do Natural Healers say of disinfection?

As mentioned in the article on "BACTERIA," we Natural Healers do not for one moment deny the existence of these microscopic creatures, or that they are, under some conditions, able to cause certain diseases, but to enable them to do so, the body of the person attacked must be in a condition favorable to this, *i. e.*, in a weakened, if not diseased, condition, otherwise the disease germs cannot live and thrive in it.

The way which we natural healers adopt in order to resist disease germs is the direct opposite of that taken by medical men. The latter make war upon the bacteria themselves, armed with all kind of weapons, more or less useless; we, on the other hand, endeavor so to strengthen our body that it is in a position to cope with its enemies unaided. How the body can be strengthened is shown in various parts of the present work; the reader should read up these and strictly follow the directions given. More particularly I would recommend strict adherence to the General Rules of the Natural Method of Living and Healing.

I would here impress upon my readers what has been repeatedly proved in the laboratorium, viz., that the greatest enemy of all disease germs is pure air containing a large percentage of oxygen. By this the most vigorous bacteria can be killed in a very short time.

Just one word on the disinfection of wounds and in cases in which surgical treatment is unavoidable. As a matter of course all natural healers are, like medical men, of the opinion that any materials used in bandaging and all instruments should be most scrupulously clean and free from all disease germs.

Yet we do not utilize for this purpose the chemicals mentioned at the outset. By reason of their poisonous properties, these chemicals are, it is true, capable of destroying bacteria, but the poisonous effects also spread to the human body, and often cause more or less serious poisoning. Therefore, we either only boil our bandages and instruments, or subject them to the effect of steam before using them. The Natural Method of Healing may look upon one fact as a great triumph—medical men are gradually abandoning chemicals as disinfectants in surgical treatment, and are now placing more and more reliance in the natural method of disinfection, viz., by paying the strictest attention to cleanliness and by boiling and steaming every article and instrument they use before proceeding to operation.

Distemper, see "EPILEPSY."

DOCTORS AND PROFESSORS.*) It is not always prudent to take all that a professor, doctor or physician says or writes for gospel. An opinion, given by an experienced though plain man, gifted with clear intelligence, whose judgment has not been warped by a long course of studies at colleges and universities, nor has deviated from the simple natural way of looking at things, is often much sounder. The ancient proverb: "the learned man often cannot see the wood for the multitude of trees" is but too true.

It is necessary above all for a man to think for himself, and not carelessly to deliver himself and his family hand and foot to the tender mercies of professional men.

Many of our medical practitioners, full of the knowledge acquired at medical colleges, and full of scholarly learning, are unable any longer to see that it is nature alone which cures the disease, and not the physic they give; in consequence of their ignorance on this point the poor patient often has to suffer untold misery.

We have to-day, thank God, already several enlightened progressive medical professors and doctors, who no longer stand stiffly and obstinately upon the dignity of learning which they acquired at colleges, having seen in the long course of practical experience that it is not the remedies, which they have learned to apply, but man's innate vital force, that cures disease.

*) Among the many professors and doctors, of whom there at present not only a handful, but shoals, there exist selfish, egotistical, rapacious, avaricious, hypocritical, indifferent, callous, and unwise men, just as among people in general.

May God grant that many, nay all, doctors will in the near future, and for the weal of mankind, follow these noble champions who do not refuse, in spite of their scholarly learning (rated at present, I regret to say, very highly, when compared with the simple knowledge of nature's ways) to condescend to study and take notice of the teaching of insignificant nature. (I would particularly refer in connection with this subject to "MEDICINE, OPINIONS OF MEDICAL MEN ON TAKING.")

Domestic Remedies, see "KNEIPP CURE."

Douche, see Index.

Douche-Bath, see Index.

Drawing Bandage, see Index.

DREAMING (and Talking in Sleep) is a more or less conscious action of the brain in sleep, which in consequence, loses in a greater or smaller degree its refreshing, invigorating effect. Dreaming may assume a morbid character when it becomes habitual and is attended by sensations of terror, anxiety, excitement or depression. To avoid frequent and enervating dreams, the evening meal should be moderate, easily digestible and early. Well ventilated, quietly situated and cool bedrooms, with open windows at night, are also necessary. All mental excitement or overwork, especially late in the evening, spirituous liquors, such as brandy and strong beer, coffee, etc., and late and irregular hours must be avoided, and attention paid to the regular action of the bowels and the skin. Should the sleeper show signs of disquieting dreams, it may be advisable to awake him. In general the rules of the strengthening treatment should be observed.

See also "INSOMNIA" and "NIGHT-MARE."

Dreams and Sleep, see "SLEEP."

Drinking, see Index.

DRINKING, RESULTS OF EXCESSIVE, (acute alcoholic poisoning), makes itself felt by headache, swimming in the head, want of appetite, depression, mental inquietude and general disinclination for anything or everything.

TREATMENT.—This unpleasant and painful condition may be soon removed by taking a warm bath (78°) with shower, especially on the head, followed by an enema (70°) and vigorous exercise in the open air with a view to perspiring. Little or nothing should be eaten and water only drunk by mouthfuls at a time. If there is no bath at hand, a wet rubbing of the whole body (water 63° to 67°) should be resorted to.

Drip Bath, see Index.

DROPSY is the accumulation of serous fluid in the tissues or cavities of the body, a condition depending upon defective absorption or greater permeability of the walls of vessels. It may also be due to other causes, such as faulty constitution of the walls of such vessels or thinness of blood. Any disease which impedes the circulation of the blood and changes its condition, particularly diseases of the heart, lungs, liver kidney or spleen, may therefore produce dropsy. Dropsy also very frequently accompanies diseases arising from vitiated tumors, *e. g.*, gout, scorbutic complaints.

Dropsy, therefore, is never an independent disease, but always a consequence of one of the above mentioned maladies.

The nature of dropsy, therefore, depends upon that of the primary disease, and it can be only permanently cured by the removal of the same.

SYMPTOMS. The blood is watery in quality and the complexion undergoes a change, presenting a pale and muddy appearance. The water of the blood accumulates in cavities (brain, chest, pericardium, abdomen, ovarium) as well as in the subcutaneous cellular tissues; in the latter case the disease is termed œdema: the pores of the skin in the faces of dropsical persons often present the appearance of being quite saturated and swollen with water. By reason of the greater obstruction to the circulation of the blood existing in the lower extremities it is in these parts that the exudation of water takes place most abundantly (Œdema of the feet). The symptoms resulting from general and local exudation of watery fluid are mainly emaciation, difficulty of breathing, weakness and lethargy, or in some cases excitability, restlessness and insomnia, feeling of cold, disordered digestion, loss of appetite, diminution of urine, dilation and tension in the body, dry and brittle skin, constant thirst and constipation.

CAUSES. The origin of the disease may in most cases ultimately be traced to want of attention to the state of the skin. If the excretory function of the skin be impaired by reason of the clogging up of the pores, an excessive amount of work is thrown on the kidneys: the latter are unable to cope with this excess of work, and, in consequence of the failure of their action, morbid matter is retained in the blood which ought to be eliminated from the system. Important organs, such as the abdomen, chest, legs, brain and heart, are thereby affected, and sooner or later dropsy appears in these parts. Other causes are: drinking too little or no water, impaired nutrition, impeded circulation and defective composition of the blood. It may also arise as a consequence of various diseases (see above); moreover, low, damp habitations and marshy neighborhoods favor this disease, and people of phlegmatic habits, with soft, flaccid flesh and pale complexions, are particularly liable to it.

Treatment. A radical cure can, as already mentioned, be effected by removing the original malady. If this is no longer possible, that is, if the primary disease is already incurable, little hope can be held out of relieving the dropsy. The accumulated fluid can certainly be diminished or temporarily removed by tapping, and by sudorific or diuretic remedies. but if the original cause continues, fresh fluid will always be formed.

The main object of the treatment must be to promote perspiration. For this purpose we should apply either steam-baths in bed or packs, with a hot-water bottle wrapped in a wet towel to the feet (see "Hot-water Bottles"), or day packs (whole, partial or three-quarter, according to the patient's condition), followed by tepid (73° to 77°) wet rubbing of the whole body or lukewarm (88° to 90°) baths. Care must be taken to select the kind of pack most suitable to the patient. One or two such packs, according to the stage of the disease, may be given daily, the patient being left to perspire in them for from half an hour to an hour. They must, however, be discontinued should they occasion any feeling of discomfort.

One or two hip-baths a day, according to the patient's condition (77° to 80°), of from fifteen to twenty minutes' duration, will be found beneficial, as also frequently repeated abdominal-compresses, with extra compresses on the renal region, if deemed advisable. If the patient can still use his limbs, frequent bodily exercise supplemented by curative gymnastics should be taken. Local friction and massage, more particularly massage of the legs, are also useful.

Non-stimulating diet, abundant fresh air, open windows at night, enemata and plenty of fresh water as a beverage are indispensable. Good results have frequently been obtained by sun-baths. Some regenerative or preliminary treatment, continued for some length of time, may, in some cases, have a very beneficial effect. (For Modes of Application, see Index.)

CURE OF DROPSY.

Communicated by L. Wunderlich, Meran, Natural Healer.

Miss *R.*, aged nineteen, suffered from dropsical swelling extending over her whole body, the result of Bright's disease. She was treated in the first place by two medical men, whose opinions were very antagonistic; one prescribed ice-compresses on the chest (probably to remove the accompanying violent convulsions), while the other doctor rejected them. The latter, a man not averse to the Natural Method of Healing, requested me to undertake the treatment, remarking at the same time, "You will not, I think, do her any more good than we have done; the girl suffers

from contracted kidneys." After treating her successfully for some days and chancing to meet Dr. Z., I said: "Doctor, that girl will dance again in three weeks' time." He replied: "Oh, she will never dance again. Even if your treatment seems to succeed, the disease will return." Four years have passed since, the girl is completely cured, did dance three weeks afterwards, and does so to this day. Her kidneys have regained their normal condition. The treatment consisted in daily steam-baths in bed (one to two), succeeded by vigorous rubbing and massage, one to two hip-baths (77°), abdominal-compresses with extra-compress (a linen cloth folded two or three times), on the renal region, non-stimulating diet, etc.

CURE OF DROPSY.

(From Dr. Körner's book "The surest cure of febrile diseases.")

I owe my life to Dr. *Koerner*, a Natural Healer. I already had one foot in the grave, and had, at the age of sixty-eight, resigned myself to death. I suffered from dropsy to such a degree that my whole body was swollen, and my chest was so distended that I could only breathe with great difficulty and had to pass the night in a sitting posturé to avoid suffocation. The feet were swollen to bursting. But I am now again restored to health and life, and can again attend to my business.

J. Nussbaum, Wheelwright, Wolgast.

Dropsy, abdominal, see "Ascites."

DROWNING. The face of a drowned person is pale in color, except when extravasation of blood upon the brain has occurred, and the skin of the whole body is cool, pallid and corrugated. See "Goose-Skin."

Treatment.—The patient should first be laid on a stretcher or on a pile of clothes and in the open air, if the weather permits, and his mouth and nose cleansed from any dirt. The wet clothes should be removed at any rate from the neck and chest, and the nostrils and mouth freed from water by holding the head low and the face downwards for a short time. Vigorous friction should then be applied to the limbs, and the face may also be sprinkled with cold water. Vigorous frequent stroking and jerking of the body has often been attended with good results. If respiration is still absent, artificial respiration (see Ibid.) must be resorted to and continued for hours, if necessary. As soon as the sufferer begins to breathe, he must be left quietly lying on his back, and the limbs must be vigorously rubbed in an upward direction with flannels; hot-water bottles may also be placed at the feet and the pit of the stomach.

In all cases of the kind the body should afterwards be wrapped in warm blankets or beds.

Dry Friction, see Index.

Dry Heat Bath, see "BATH, HOT AIR."

Dry-Pack, see Index.

Dry-Scab, see "RUPIA IN HERPETIC ERUPTIONS."

Dumplings, see "DIET."

Duodenum, Cancer of the, see Index.

Duodenum, see Index.

DUST. The number of dust motes in the air has been investigated by *John Aitken* for a long time past with the aid of an apparatus constructed for the purpose. This inquirer has made experiments on 200 different samples of air from various places in western Europe, and has obtained highly interesting results. Near Hyères, a small place in the south of France, a short distance from the Mediterranean, the number of motes in a cubic-centimetre of air was 1,550, but this number was increased to 25,000 with the wind blowing from the direction of Toulon. On the top of the "Croix des Gardes," near Cannes, the air contained 1,550 motes per cubic-centimetre with wind blowing from the mountain, whereas there were as many as 150,000 when the wind came from the town. The number of motes was fewer in Mentone, but the air coming from the Mediterranean to the cost bore with it a not considerable number of motes, ranging from 1,890 to 10,000 particles per cubic-centimetre. In two places, Bellagio and Baveno, in the Upper Italian Lakes, the number fluctuated between 3,000 and 10,000 per cubic-centimetre, but the wind was blowing at the time from the clouded parts of the neighborhood.

The air on the Rigi-Kulm was considerably purer. When the top was covered with clouds there were 210 particles on the average; this number afterwards increased to 2,000, diminishing in a higher position to 500. The latter number is the same as at Vitznau. The Swiss air is altogether extremely free from dust, probably because it comes from the mountains. In Paris, in the gardens of the Meteorological Institute, there were found to be 160,000 to 210,000 motes; in London, 48,000 to 116,000; these are very high figures, though the results depend largely on local conditions. On the top of the Eiffel Tower the number of motes fluctuated very considerably, viz., between 104,000 and 226. This

latter number was registered in rainy weather, and proves, what cannot be sufficiently emphasized, that the rain washes the atmosphere in the proper sense of the word, frees it from the myriads of motes floating in it, in short, provides a pure, wholesome air in a far more perfect degree than is possible in any other way.

Dust in the air of a room.



Fig. 106.

This disk, magnified about 300 times, shows the dust in the air of heated rooms kept apparently clean.

Dwelling and Workrooms, see Index.

DYING may take place: gently, with gradual loss of strength, in consequence of old age, without previous illness; consequently without pain, imperceptibly during sleep. The death is the natural, normal one, which was intended by nature. Every other death is unnatural, abnormal, accidental, unnecessary and premature.

There are very few people nowadays (among a thousand perhaps hardly one) who die this natural death.

Secondly.—Slowly, in consequence of loss of strength through previous disease.

Thirdly.—With a violent struggle, consequent on the degeneration and decay of vital organs, and often with full consciousness.

Fourthly.—Quite suddenly, resulting from laceration of the great cardial artery or through poisoning; respiration then ceases at once. Sometimes death results from apoplexy. People frequently succumb to the last three modes of death in the prime of life.

Death is usually described as the result of fainting (cessation of the heart's action), suffocation (stoppage of the lung's action) or apoplexy (cerebral paralysis). The entrance gates to death are, therefore, the heart, the lungs and the brain.

For indications of dying, see "DEATH, SIGNS OF."

HOW MAN DIES.—Ever since the dawn of human history death has been looked upon as necessarily attended by pain. But nothing could be more mistaken; the truth is that dying and pain are hardly ever found together. Weeks and months of severe suffering may, of course, precede death, as in the case of certain incurable diseases; but, as death approaches, a certain insensibility takes place, which kind Nature has provided. Respiration becomes slow and faint, now and then a deep inspiration, somewhat like a sigh, is made as if the lungs wanted to free themselves from paralysis, and between the intervals, becoming gradually longer with each breath, the blood is charged more and more with carbonic acid, the same gas which is produced by burning coal, and whose deadly but painless effect has often served the purpose of suicide. Respiration becoming thus by degrees weaker, the heart, which is in intimate connection with the lungs, begins to contract with decreasing force and drives the blood only a short distance through the arteries; this is the reason why the extremities get cold first. In the same way the blood which goes to the brain not only becomes less in quantity, but gets more and more charged with carbonic acid, which by its deadening effect on the nerve centres in the brain destroys both consciousness and sensibility. The patient sinks gradually into a dull, brooding mood; his lips assume a grayish blue tint, the face gets cold and pale; cold perspiration collects on the forehead, a small pellicle is displayed on the corner of the eye, and, with or without convulsions, the dying person lapses into his last sleep. But the capacity of receiving conscious impressions having vanished, the so-called death-struggle must be of a purely mechanical nature. Even in cases where perception by the senses endures to the end, consciousness is generally calm and collected and the body free from pain. "If I only could hold a pen, I would write down how easy and how pleasant it is to die!" were the last words of the celebrated surgeon Hunter; and the last words of the French King, Louis XIV, are said to

have been: "I thought that dying was so much harder." All persons who have been near to death by drowning, and who have been restored to consciousness, assure us that they suffered but little at the moment when they thought that death was approaching. Captain Marryat even asserts that his sensations were absolutely pleasurable at the moment when he was drowning. "When the first struggle for life was over", he tells us: "I took the encompassing waters to be waving green fields. It was anything but a painful sensation, for I felt as though I were gradually sinking down in the soft high grass of a cool meadow". This is exactly the condition at death in consequence of illness. Insensibility supervenes, the mind loses the perception of outward objects, and death sets in soon and calmly, in consequence of the functions ceasing to operate. The condition of insensibility produced by chloroform is accompanied by similar visions to those attending dying persons. The present is forgotten, and the pictures of the past, preserved for many years in the storerooms of the brain, become living. The known faces of the friends of our youth appear before our inner eye; their voice sets our inner ear into vibration, and the thought of meeting them or other beloved friends again in the near future is perhaps the last flash of consciousness. In the measure as the mists spread increasingly over our mind, these visions of a disturbed imagination change into reality, and nature, which has stored these reminiscences in the ganglions of the brain during a great many years, bestows on the dying creature a real benefit by setting these reminiscenses free. It is a tranquilizing thought to know that also the modern science death is no longer the horrible skeleton with the sharp scythe, but a painless dissolution.

DYSCRASIA IN INEBRIATES, that is degenerate condition of the humours of the body and more particularly of the blood, which is caused by the continued and habitual drinking of alcoholic beverages. The treatment consists of gradual withdrawal of all beverages containing alcohol and then strengthening cure. For the rest see "DIPSOMANIA."

DYSPEPSIA, NERVOUS. A case cured in the *Bilz* Sanatorium.

Mr. *E. M.*, of M., aged thirty-one, entered our sanatorium on the 26th of February 1896. He came of a healthy family; and had always enjoyed good general health himself. In 1888 he was treated for tapeworm and since that time, he declared, he had suffered from a weak stomach and indigestion. His appetite was usually voracious; immediately after satisfying it, however, he was frequently seized with diarrhoea, varied occasionally by an attack of constipation. Heavy, indigestible articles of diet could sometimes be taken without any subsequent discomfort, while

on the other hand his stomach would often rebel against the leanest food; in short his digestion could not be depended upon. He had for some years taken a great deal of medicine; there was scarcely a remedy for indigestion which he had not tried, and he had for some time been kept alive by meat extracts, peptons, preparations of pepsin and albuminates etc. The success of this treatment was not very gratifying. His condition grew daily worse, his strength declined more and more, and he was worn almost to a skeleton when he entered our sanatorium. A closer examination showed that there was no actual disease of the stomach or bowels, but that the patient was suffering from general nervous debility (neurasthenia) and poverty of blood in consequence of long continued insufficient nourishment. The stomach trouble was therefore not an independent disease, but a symptom of general nervous debility, known as nervous dyspepsia. This being so there could be no doubt as to the proper course of treatment to adopt. The aim to be kept in view was to strenghten the constitution and more particularly the nervous system. If our diagnosis were correct, the local ailment would then disappear.

The patient was, therefore, much surprised to learn that all he had to do was to follow a few general directions; to spend much of his time in the open air, to take air-baths, to sleep in an open air hut, to walk barefooted and to undergo a mild water treatment (shallow and hipbaths of 77° to 82°). The only local application consisted of a mild shower bath on the stomach on coming out of the shallow bath to promote activity in the digestive organs. His astonishment reached its height, however, when he was told that he did not need to observe any special diet, but might eat the regular food given in the establishment (light non-stimulating, mixed diet). He went to meals with fear and trembling, believing that the most terrible irritation of the stomach and bowels was in store for him. Nothing of the sort happened. The food agreed with him thoroughly well from the very first day, and no further disturbances of digestion occurred during his stay here, while his general health improved in the most gratifying manner. In a month his condition was such that anyone else in his place would have considered himself cured and would have left the establishment. Not so our patient. He rightly thought that a disease of many years standing could not be permanently cured in so short a time as a month, and that the improvement in his health ought to be thoroughly established by a longer residence in the sanatorium. He consequently remained two months longer, and left us, the picture of health, having gained about twenty pounds in weight.

DYSENTERY occurs nearly always in autumn and is usually epidemic. It is characterized at the commencement by gripping pains, is diphtheritic in character, and is not unattended by danger on account of the continual evacuations of mucus. The season when fruit ripens is extremely favorable to the development of the disease. It begins as a rule in the rectum and notably at that end of it, where the S romanum joins (passing from the colon to the rectum). Two forms are distinguished:

1. The catarrhal form, in which the mucous membrane is swollen in consequence of engorgement of blood, dotted with red, streaked, and covered with bloody mucus. Simultaneously there arise small ulcers, making little round holes in the mucous membrane, which get larger and deeper, and are sometimes productive of extensive inflammation and disintegration.

2. The diphtheritic form, the more dangerous one, in which the large intestine with its wales, teeming with blood, contracts into a strong, hard, crimson cord, while its mucous membrane is covered with an ashy-gray, diphtheritic layer. This latter eats its way lower and lower, finally perforates the intestine, and produces a fatal inflammation of the abdomen. Dysentery is called gangrenous, when large, blackish malodorous pieces of skin come away with the stools. It is attended at the same time with violent fever.

Dysentery is contagious only in the last stage.

Causes.—Eating unripe fruit, drinking impure water, rapid change of temperature, alternation of hot days and cold nights; also puerperal fever, miasma, Bright's diseasé, typhoid fever.

Treatment.—Vegetarian diet, avoiding fruit and milk. Semi-liquid nourishing food such as barley-gruel, oatmeal porridge etc. should be preferred, the thirst being quenched with fresh water. Small enemata, containing starch (decoction of starch flour) from a quarter to half a tea-cupful, three or four times daily, should be given.' After every stool a small, tepid (66° to 73°) enema of pure water may be given.

Continual stimulating (73°) abdominal-compresses, duration from two to three hours, or longer if necessary, combined with a fever treatment, according to patient's condition.

With cold feet a foot-steam-bath, duration from fifteen to twenty minutes, followed by a (73°) stimulating foot-pack of from two to three

hours is of great advantage. Afterwards vigorous wet and dry rubbing of the legs.

In some cases a (77°) wet rubbing of the whole body may be given once a day. For Modes of Application see Index.

CURE OF SEVERAL SOLDIERS ATTACKED BY DYSENTERY.

(By Fr. Meyner, Natural Healer, from the Journal of Hygiene and Natural Therapeutics.)

During the Franco-German war I had a field hospital in Taverny, near Paris, for wounded soldiers, and especially also for those attacked with dysentery, of whom there were always a great many. I treated the latter with the Natural Method of Healing, and with excellent results. I did not lose a single soldier, and that is saying a great deal, considering that officers and soldiers about us, who were taken to other hospitals, in many cases for slight wounds only, were attacked there with dysentery and died under medical treatment, which is still always the rule.

My modus operandi was as follows: In the first place, I caused my patients to observe a strict, vegetarian diet; they had, therefore, nothing but rice, ground wheat, small groats and sago, boiled in water, and to quench their thirst, splendid, ripe, fresh fruit, such as we rarely see in Germany. In the next place they frequently had small, cool enemata given to them to overcome the extremely painful stools; but the most soothing remedy proved to be the abdominal compresses, which were changed as soon as they became warm.

With this treatment my soldiers speedily recovered from dysentery within five to eight days without any after-illness.

They had absolutely not a drop of medicine, and I cannot refrain from mentioning what our regimental commander, Colonel *Crusius*, said to me on one occasion. He came one day to inspect my hospital, and, having looked at everything, he said: "Well, I find all in the very best order, but I miss one thing, and that is, where are the medicines for your patients?" (by the side of each bed, there always stands a small table on which the medicines are placed). I answered: "Colonel, in regard to the treatment of patients, my views differ from those of the majority of my colleagues. I don't give any medicine at all." The Colonel tapped me on the shoulder, saying: "Then you are my man; I don't take any either."

E.

Ear. See Model at the end of the book.

EARACHE is not always accompanied by inflammation of the ear, and may be an attendant symptom of rheumatism, gout, or nervous affection. It may also be the result of a cold. When caused by the first mentioned it may be removed by lukewarm injections (86°), by applying soothing compresses (77°) or by a steam-bath followed by a full-pack and bath or douche bath afterwards. For Modes of Application see Index.

EAR, BAD (RUNNING FROM THE EAR) (Otorrhoea), is a result of the putrefaction of substances in the outer auditory canal, or arises from the destruction of the membranum tympani in the tympanic cavity. The aural passage has to be examined with an aural speculum, in order to see what the contents are.

TREATMENT.—Frequent tepid injections and rinsing, as well as ear-baths with water (81° to 86°). For the rest see "OZOENA."

Ear, Discharge From. See "EAR, INTERNAL INFLAMMATION OF."

Ear, Diseases of the. Besides those mentioned here see also "HARDNESS OF HEARING" and "BAD HEALTH."

EAR, DISEASES OF THE. Hearing, Hardness of. If hardness of hearing is caused by a faulty construction of the acoustic duct, then it is simply incurable. In most cases hardness of hearing is brought about by a variety of other causes or diseases.

The causes may be as follows: Inflammation of the ear, a discharge from the middle duct, particularly after scarlet-fever, diphtheria, etc.; singing in the ear, stoppages in the acoustic duct, caused, for instance, by the hardening of the earwax or some small object or insect finding its way into the duct.

Hardness of hearing is furthermore caused by a thickening, calcination or total destruction of the drum of the ear, brought about by discharges, perforation, etc.; then there is hardness of hearing or deafness of a nervous kind, its cause being a serious affection of the acoustic nerves.

TREATMENT.—In the last mentioned cases it is a matter of considerable difficulty to effect a cure, and only if the patient pays strict attention to all sanitary rules and can afford to suspend partly or wholly the performance of such duties as are involved by his calling, and by giving his skin a thorough treatment, such as daily wet rubbing of the whole body with lukewarm water, say at a temperature of 72° to 76° or by as often taking a lukewarm bath (88°), nature may assert its power and a partial

cure may result from such treatment, even in cases where deafness or hardness of hearing is attributable to affected nerves. Therefore a most rigorous carrying through of the invigorating treatment must above all be kept in view in all cases of hardness of hearing and not only in those of a nervous kind.

Besides this, steam-baths must be taken in bed, followed by a rubbing down of the whole body, nightly stimulating bandages round the abdomen, and the application of stimulating poultices to the neck and throat should not be omitted. Every morning there must be a rubbing down of the whole body with water of a temperature of 78°. Massage of the ear and throat, the chewing of hard crusts of bread, gargling (68° to 86°), and bathing the mouth, douching the nose, ear steam-baths, ear baths and rinsing of the ear, are all things of great importance in effecting an eventual cure. If congestion of blood in the head should take place it is well to have it removed immediately.

Ear-Wax, Hardened, How to Remove, see "EAR, NOISES IN THE."

Ear, Insect in the, How to Remove, see "EAR-WIG." See also "EAR, DISEASES OF THE" in "KNEIPP-CURE." For Modes of Application, see Index.

Ear-Trumpet for one ear.

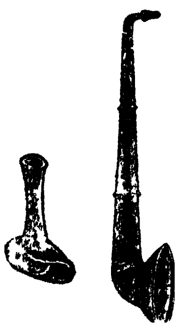


Fig. 107. Fig. 108.

To be introduced into the ear during conversation and held with the hand.

Ear-Trumpet for both ears.



Fig. 109.

To be adjusted to the head by means of a spring.

If satisfactory results cannot be got from this mode of living and treating the disease, then the patient must look about for other means. First of all let us mention the so-called ear-trumpet (hearing machine) such as may be had from the manufacturer himself or can be obtained at a dealer's in chirurgical instruments. These instruments usually take the shape of a funnel, the thin end being introduced into the ear of the patient, whilst the person speaking to him uses the broad end (Figs. 107 to 109).

There is an ingenious contrivance called a sound-catcher which may be placed on the table, the end of the rubber tube attached to it, and which is used for the purpose of carrying the sound (see Fig. 110). Besides this one there is a variety of other and smaller devices (a simple and inexpensive thing can be constructed by taking a

piece of vulcanized rubber tubing, introducing one end into the patient's ear, and adjusting a head or funnel to the other end, into which one speaks. The strength of the sound effected by these instruments varies considerably, and the shape and dimensions of the ear-trumpet must be in accordance with the ear.

Sound-Catcher.

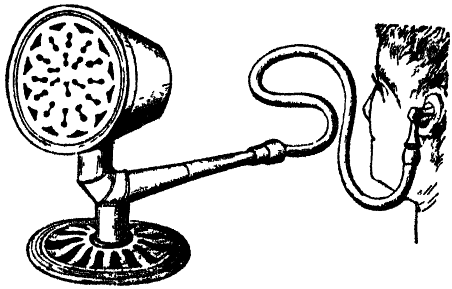


Fig. 110.

As a rule the effect of the sound of these contrivances upon the ear of the patient is too strong, and if the instrument is too frequently used, may prove injurious to the affected organ, therefore the new ear-trumpets, invented by *F. Leiter*, of Vienna, and *Rettig*, of Saarbrücken, are much to be preferred, for they do not necessitate an immediate speaking into, but are rather sound-catchers, they are handier and the annoying after-sound is done away with. It is a regrettable fact that these last mentioned ear-trumpets are still a little high priced, a drawback which we trust will soon be remedied. Doubtless, a number of suffering persons have been benefited by using the Bäh-apparatus, an invention of *K. Schulze*, of Weferlingen, through which, by using introductory tubes, the steam of pure water may be introduced through the nose into the eustachian duct. This modus operandi is particularly effective in cases where hardness of hearing has been caused through contraction of a cold, superabundance of mucus, thickening, contraction, etc. In some cases those annoying sounds in the ear have been removed in this manner. One thing is to be particularly borne in mind, namely that by using any of these instruments too frequently the organs in question may become affected. It is a well known fact that it is detrimental to the ear to disturb it too often.

We here quote Dr. *Kramer:* The usefulness of the ear-trumpet must be tested in each single case, as this cannot otherwise be ascertained. There is one general rule to be observed usually—that ear-trumpets which leave a sensation of dullness in the ear must be used but seldom, and then only for a short time, just the same as spectacles, which, after being used, leave the eye with an appearance of dullness and of being rather tired, must either be avoided altogether or at least rarely used. Another way of communication is by watching the mouth of the speaker, and thereby

gathering the purport of what is being said, a thing that has been introduced as a particular science at institutions for deaf and dumb people.

A more detailed account on this subject will be found in *G. Riemann's* book, "Advice to Deaf People and Those of Hard Hearing," on page 25, which also gives a number of illustrations of ear-trumpets. Also look up the treatise on deafness. I append some illustrations of useful ear-trumpets.

As the kind and seriousness of the cases of hardness of hearing vary very much, and the effect of the divers ear-trumpets differ a great deal, it is necessary that the patient should try which suits him best. The ear-trumpet which is undoubtedly the most efficacious, and also the handiest in practical use is the patented pocket ear-trumpet by Leiter, as shown in plates No. 111 and 112.

This ear-trumpet has the advantage that it does not affect the ear, does its duty at a considerable distance, and that its effect is improved by a prolonged use, an advantage which is altogether missing in any of the other instruments.

This ear-trumpet may be obtained at almost any dealer's in surgical instruments; if such an establishment does not exist where you live, apply to Mr. *H. Wendschuch*, sen., Dresden.



Fig. 111.

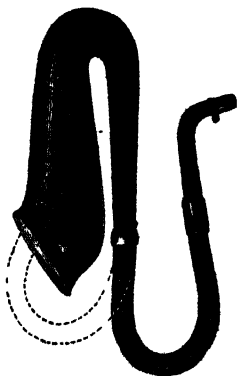


Fig. 112.

How to Render Oneself Artificially Deaf:

The "Fr. Ztg." writes: *Boettcher's* Antiphon which is used by the European to exclude from the ear the noises of the rolling, driving and bustling era with its gigantic traffic and its roaring machinery, has not been able to gain for itself a notable prestige, in spite of the decided advantages it offers. I happen to know a poet who asserts that by using

this antiphon he succeeds in excluding rude reality, and thereby manages to concentrate the tender inspirations of his soul. Professor *O. R.*, of Breslau, recommends a very simple thing as a substitute for the antiphon, wherewith the acoustic duct is completely closed, and which is far superior to any of the other devices used heretofore. In the first place, the device is used to combat against insomnia in nervous patients, who are prevented in dropping asleep by even slight noises. In such cases it is said that the closing of the acoustic duct is a more efficacious remedy than any medicinal means of soothing the patient. It is obvious that this device may be used by any person who desires to close his ears completely. *R.* advises a piece of medicinal wadding to be carefully spread in a rectangular shape about six to seven centimetres in length and about three to four centimetres in breadth, the whole surface of this rectangular to be thinly covered with vaseline and then rolled up. This cylinder of wadding, which, if desired, may be shortened at the ends, will be about the thickness of your little finger. Place it carefully into the ear, and it will thus form the new antiphon.

HARDNESS OF HEARING.

Cured by L. Wunderlich, Natural Healer, Meerane.

Quite a number of persons troubled with hardness of hearing have been cured quite suddenly and by very simple means, as the following two cases will show.

I undertook the treatment of a millhand of the name of *Seifert*, and of a journeyman chimney-sweep called *N.*; the former had been hard of hearing for four and the latter for five years. Both men had been treated by medical men and specialists without success. I applied vapor baths to the whole body daily, followed by a whole-pack, a douche (18° R.) with a (24° R.) jet into the ear. Some time after these modes of treatment had been applied, and while the ear was being douched, the patient was startled by a loud report in the ear, followed by sounds of music and singing, and after a comparatively short time both patients were rejoicing in the fact of having completely regained the faculty of hearing.

Where a douche cannot be obtained, a large syringe may be used for the purpose of injecting water into the ear.

A small ear-syringe has not the required effect.

HARDNESS OF HEARING CURED.

Two cases treated by Baron von Bistram.

Some time ago I was consulted by a middle-aged woman, evidently belonging to the working class, who was afflicted with hardness of hearing. She told me that she had been deaf from infancy, and, therefore,

been unable to choose a better vocation than that of a char-woman. Somebody, she informed me, had told her that I had succeeded in curing such cases, and she begged me to try and cure her. After subjecting her to a thorough questioning, I found that she had been ailing in a general way from infancy and had suffered from an affection of the mucous membrane, not only of the nose and larynx, but also of the bladder and the digestive organs. Now it became clear to me how to treat the woman; it was less a question of treating the acoustic ailment than of treating the whole organism of the patient.

I prescribed for the conscientious observance of those rules of living that she had most neglected, for although she earned her livelihood by charing and keeping things clean for other people, she had sadly neglected to keep her own body clean.

The physician attached to the ward, to whom she applied for free baths, told her it was simply ludicrous to think that baths would cure hardness of hearing, and that she would do better to apply to a clever specialist, who would do all that was necessary for her, and eventually cure her. "But surely," the woman said, "I have followed that man's advice repeatedly without one of these gentlemen being able to help me."

Yet the ward-physician adhered to his idea, that baths would be of no use in such a case, and that this being so, she had no right or claim to them. The woman did not let this deter her, but applied to another physician of sounder judgment, of whom, under the pretext that baths had always done her good, she obtained an order for free baths. After using tub-, hip-, foot- and vapor-baths, and paying strict attention to the mode of living prescribed for her, such as diet, exercise, syringing the ear, etc., she was, after the lapse of the third week, agreeably surprised by the fact that she was suddenly in possession of the faculty of hearing, a thing she had never enjoyed as far as her recollection went. She told me that whilst walking in the street she had been startled by a loud report in her ear, and that, immediately after that the noise and rolling of the passing vehicles had become so intolerable to the unaccustomed ear that she had been obliged to put up her hands to them, and had had to close her ears with cotton-wool for several days after. Two years have passed since, and the acoustic nerves of that woman's ears are still doing their duty.

Such are the results of our simple method of treatment, which necessitates no other means to regain lost health than those that should be employed by every person wishing to remain healthy.

A second case that came to my knowledge was that of a younger person, who wished to enter my service, and whom at first I could not

make up my mind to employ, because her case was so desperate, that no matter how hard she tried, she could not hear the ringing of the hall-door bell from the adjoining kitchen. But we will let her speak for herself.

"I had always been scrofulous from infancy, and troubled with a lot of ailments, resulting from an impure condition of the blood (*i. e.*, coughing, chronic cold in the head, the formation of ulcers, etc.). In 1868 I fell ill with a painful catarrh in the ear, in consequence of which I not only lost my hearing, but became subject to general debility, so that, when a few years later I was anxious to enter the service of Baron *v. Bistram*, I became painfully alive to the fact that, in the condition I was in, I could be of very little use to anybody. There was only one alternative left for me, and that was either to regain my health or to become utterly destitute. I implored the Baron to take me into his service, and he not only did this, but also gave me an opportunity of living up to his prescriptions. In a few weeks I noticed a decided improvement in my condition in a general way. Those intolerable noises in the ears had ceased altogether, as well as the continual shivering, my hands and feet assumed a normal temperature, and what was the principal thing, my mental condition had improved considerably. I could look forward to the future with hope and confidence.

While I was under treatment, a crackling noise in the ear set in, soon developing into loud reports, at first in one ear, then in both, and since that time I have been in the full possession of the faculty of hearing.

Eight years have passed; I have since become a wife and the mother of several children, and nothing worth mentioning has ever ailed me since. For all this I have to thank my former master and physician, who has taken such great pains with me.

Marie Schubert, Reichenberg in Bohemia.

EAR, FOREIGN BODIES IN THE. Children often have a bad habit of putting small objects such as little stones, peas, beads, etc., into their ears. It sometimes happens that insects, worms or ear-wigs creep into the ears of people when lying on the grass, but this is a very rare occurrence. No matter how the substances get there, it is advisable to remove them as speedily as possible. In order to do so it is necessary to have as much light in the ear as feasible, and the person troubled with anything in the ear should be placed so that the light from the window or lamp freely enters the passage of the ear.

Then bend a hair-pin as shown in wood-cut No. 113, and insert it in the ear in such a manner that the bend reaches beyond the object to be removed, but great care should be exercised in the insertion, otherwise the object may be pushed further in, and probably beyond reach.

Many things may be removed by oft-repeated injections of lukewarm water. When the water is being injected, the earlobe should be bent slightly upwards and backwards in order to straighten the curve of the ear passage. If an insect get into the ear, the person should hold

Wire sling made of a hair-pin to remove foreign bodies from the ear.

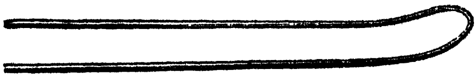


Fig. 113.

his or her head in such a way that the ear in which the insect or the earwig has crept points upwards. The ear is then filled with oil or water. This will stifle the creature and a few injections will readily remove it.

EAR, INFLAMMATION OF THE (EXTERNAL), (Otitis). External inflammation of the ear attacks the epidermis, the cuticles of the cartilage and bone, sometimes even the cartilage and bone themselves, frequently also the tympanum. It is greatly inclined to suppurate.

If the tympanum suppurates, as it frequently does in measles, scarlatina and smallpox, it may become perforated and the hearing much impaired.

Symptoms.—Swelling, redness, and pains in the auricle, spreading occasionally to the adjoining portions of the face; dryness in the auditory canal and defective hearing. Frequent vomiting, delirium and fever.

Treatment.—Tepid (68° to 72°) compresses, covered with flannel, changed when warm through, and to be applied to the inflamed ear until the inflammation subsides. Bathe the ear or region of the ear repeatedly with water of 72° to 77°. Stimulating leg-, foot- or calf-pack and abdominal compress at night, a tepid (72°) wet rubbing of the whole body in the morning. Also a detergent treatment, coupled with cooling compresses on the region of the ear may be carried out in the day time. Likewise several tepid (73°) injections by means of an ear-syringe.

Ear syringe.



Fig. 114.

Inflammation of the ear, when the tympanum is attacked at the same time, is best treated by filling the ears three times daily (morning, noon and evening) with lukewarm water (86° to 90°). The head is placed on ear-cushion sideways and filled with water, which is left in the passage till it gets warm and till the boring pain begins afresh, when the process is repeated. If it is required to empty the water out of the ear, the head is simply turned round on the other side.

In the same way water (75° to 86°) is drawn up into the nose, and the mouth bathed with water of 73° every two or three hours.

In addition, massage of the throat, non-stimulating diet, and enemata as a detergent and for constipation. If there is fever, a lukewarm (86° to 88°) bath, with vigorous friction of the skin. No cotton-wool must be put in the ears, in order that the air can circulate in them.

See also "EAR, DISEASES OF THE," in "KNEIPP CURE."

For further particulars on Massage, Kneipp Cure and Modes of Application see Index.

EAR, INFLAMMATION OF THE (Internal). Internal inflammation of the ear is productive of most violent pains, which frequently spread as far as the throat, the sense of hearing is impaired, other symptoms are whistling noises in the ear, painful swelling, difficulty in swallowing, swollen tonsils, often also irritation of the brain, delirium and fever. If suppuration takes place, it points to internal decay. The pus discharges in these cases either through the tympanum into the external passage of the ear, or through the eustachian tube to the gullet.

Internal inflammation and suppuration are often the result of medical treatment; they are of frequent occurrence in connection with measles and scarlet fever, also with syphilis, gout, and cutaneous eruptions.

TREATMENT.—As in external inflammation of the ear. In addition apply soothing or cooling throat compresses (66° to 73°) up to the ears, and change after one and a half to two hours, in fact as soon as they get warm.

Also steam-baths in bed (No. 1), or steam-baths followed by pack and bath twice a week. Scotch plaid or abdominal packs at night, attention to cutaneous action in the form of a daily bath or wet rubbing of the whole body. The pus must be removed from the ears by lukewarm (81°) injections.

Ear, Inflammation of the Salivary Gland of the. See "MUMPS," also "DISEASES OF THE EAR" in "KNEIPP CURE."

INFLAMMATION OF THE EARS.

(Cured by H. SPERLING, Therapist of Berlin.)

Mrs. *G.*, Blücher-Strasse 14, Berlin, who had suffered for years from an abdominal complaint, contracted internal inflammation of the ear, which produced a large swelling. This affection caused the patient such violent pain as to render her almost demented. The swelling had drawn the neighboring organs into sympathy; the nose, the parotid glands, and

the throat were so swollen as to make it impossible for her to swallow even a drop of water. The case commenced, under medical treatment, to become so critical that other advice became necessary, and so it was that I was consulted.

I saw that there was danger in delay, and caused a mattress to be placed on the floor, on which the patient was laid, prepared a head-bath of 90°, had the inflamed side of the head put in as deep as practicable, wound a cool, wet compress round the throat, and ordered a steam-bath in bed. The heat was so great that the water of the head-bath had to be renewed every five minutes, and if this were omitted for however short a time, the pains returned. Therefore, these baths had to be continued uninterruptedly. This treatment was applied with short intervals at first, and longer ones afterwards.

After the steam-bath I gave full pack, wet rubbing (73°), and after a few hours' interval abdominal, shoulder and leg-pack; mouth baths continued by turns for three days, after which improvement and sleep set in. The swelling and the pains subsided perceptibly. Appetite made its appearance, which was satisfied by a strictly non-stimulating diet. The swelling of the throat subsided, and the patient was now able to drink plenty of fresh water. Moreover, massage was applied, particularly throat and trunk massage, and head and arm gymnastics prescribed; hard bread crusts were given to her to chew, to act as internal massage on the organs of hearing. By this energetic treatment the formation of ulcers was prevented.

The patient's condition improved from week to week, and the applications were reduced correspondingly. Head-baths and compresses, steam-bath in bed, full-pack, abdominal packs, shoulder-packs, leg-packs, partial hip-baths, and wet rubbing were alternately given until after the lapse of several weeks, Mrs. *G.* could be considered cured.

CURE OF OTORRHOEA.

(From Pastor König's book, "The Natural Method of Healing.")

As a child of three I had scarlet-fever, and an ulcer formed on my throat, which found an outlet through the ear. Owing to neglect there was from that time forward an inflammation of and discharge from the auditory canal, which the most eminent aurists, whom I consulted, were unable to cure.

After suffering for upwards of thirty years, and having lost all hope of recovery, I applied Pastor *Koenig's* modified *Schroth-Priessnitz* Natural Method of Healing, consisting of a modified regenerative treatment,

frequently syringing the ears, etc., and, contrary to all expectations, I was completely cured of this deep-rooted malady after a six and a half month's treatment. *H. Reinhardt*, Ross-Strasse 6, Berlin.

EAR, INSECTS IN THE. If insects penetrate far into the auditory canal, water should be poured or squirted into the ear, while the head is held sideways, until the insect creeps out again, or is drowned.

EAR, RINGING IN THE, may be acute or chronic. The former complaint generally disappears with the particular affection which produced it.

CAUSES.—The noise, or buzzing, or report in the ear may be caused either by congestion of blood at the tympanum, or by ear-wax becoming detached or taking up another position. These circumstances produce various noises, which are perceived by the ear in the most divers ways. Ear-wax, which has become hard, may cause the same noises.

According to some authorities, the crackling noise in the ears arises from tension of the tympanum (or, to speak more correctly, by the sudden opening of the eustachian tube), or from extreme tension of the masseters; ***singing noises*** in the ear, says *Helmholz*, are produced by the serrated teeth striking the joint between mallens and incus; ***buzzing noises*** by the vibrations of the air in the outer auditory canal or in the tympanic cavity, when these are separated from the outer air, the eustachian tube, or the other auditory canal being stopped up; ***throbbing in the ear*** by the pulsation of neighboring arteries.—*Niemayer* writes as follows about noises in the ear: Hardly visible though the carotid glands in our throat are, still their powerful pulse is felt very distinctly, when two fingers are placed gently round the region of the larynx, and the finger tips pressed a little deeper into the flesh. We can even perceive them by the ear, if the blood is in greater motion than usual. The carotid glands winding from the throat upwards into the cranial cavity through a rigid passage formed of bones, a passage situated in the vicinity of the ear, are heard to throb there against the tympanic cavity, as it were. Even with a quiet pulse the auditory canal being dry and the tympanum injured, this pulsation of the carotid glands gives rise to the annoying symptom of noises in the ear, caused, perhaps, by a small quantity of air being expelled or rather blown out by every pulsation. In patients suffering from defects of the heart this pulsation may spread to the veins of the head, so as to produce the sensation, as it has been defined, of a top humming in the head.

People in particular affected with determination of blood to the head suffer most from noises in the ear.

TREATMENT.—In the first place I advise patients afflicted with these as well as with other affections of the ear, or who suffer from difficulty

of hearing, never to interfere too much with their ears. I know several persons who are nearly deaf, who were treated in vain by the many famous ear-specialists and professors for years, the result being only an aggravation of the affliction.

The following points must be kept in view:

1. Such patients must never excite or over-exert themselves, and most particularly so when the difficulty of hearing is of a nervous character.

2. They must, above all, have regular (daily) open bowels; see "ENEMATA."

3. They must take long walks, barefooted by preference, and, if possible, wade in deep sand for some length of time every day. By doing so they will almost feel the determination of blood to the head, which produces the noise in the ears, to abate and draw down; in lieu of this some other detergent treatment may be applied.

Several lukewarm (77° to 88°) injections into the ears should be made about three times a day, and tepid (73°) garglings as well as drawing water (81°) up into the nose.

Stimulating leg or foot-packs and abdominal compresses at night, which may also be preceded by a foot-steam-bath for twenty-five minutes and cool, wet rubbing of the feet. In the morning wet rubbing of the whole body (73°), but not performed by the patient himself. A daily foot-steam-bath (from a half to three-quarters of an hour duration), or a foot-steam-bath in bed, followed by tepid (73°), wet rubbing of the whole body, or cool (66°), wet rubbing of the feet may be applied besides. In addition to these may be given two three-quarter steam-baths in bed a week, followed by a lukewarm (88°) bath. Diet, as much as possible non-stimulating.

The above treatment must, it is true, be continued for some length of time, to remove this disagreeable noise in the ears. The rules which guide the strengthening treatment must, likewise, be observed. If blood to the head is the cause, detergent massage will be beneficial. For Modes of Application see Index.

If the disorder is the result of ear-wax having become hard (which may be ascertained by looking into the ear, and seeing instead of a light-colored tympanum several small clots of dark-yellow or black color at the end of the auditory canal), it must be removed. To do this, take a small bottle of sweet oil, and warm it slightly by dipping in warm water, then drop some of the oil into the ear-passage in the evening; close it over night with a plug of clean cotton-wool which is also oiled; in the morning warm water is gently dropped or injected into the passage, and the patient may

then clean it out very cautiously with a hair-pin or a small ear-spoon, or with a little piece of rag rolled up, or else it is done by means of a fine jet of water from a small syringe. It is hardly credible what a quantity of dirt is sometimes brought to light by this injection. Also, steaming the ear, followed by a tepid syringing, is recommended.

It often surprises people very much, when complete or partial deafness is cured in this way at one stroke.

The following precaution is also necessary: The drum after being relieved of its incubus may easily take cold through draught, it is, therefore, advisable to insert a plug of cotton-wool into the ear for a few days. See also "HEARING, HARDNESS OF." *Troeltsch* furnishes in his manual for ear-specialists an interesting contribution on the subject of difficulty of hearing making its appearance suddenly. We cite this case here as he gives it:—One night an elderly man left a tavern, where he had been engaged in animated conversation, and on the way knocked against a carriage pole, stupidly left in the way, and by the violence of the blow was thrown to the ground, striking his head against the pavement. He thought he must have lain there for about a quarter of an hour, and was unable to determine what share the striking of his head on the stones and the various pints, which he had drunk, had in his unconsciousness; but he acknowledged he had been rather foggy before. However, he got up, and went home, without further mishap. Having passed a good night, he and his family found that he had become almost as deaf as a post. The doctor, who was called in, shook his head and, like the patient, could only connect this sudden deafness with the blow his head received on the pavement. He pointed out to the family the seriousness of the case, and that it was, at the very least, concussion of the brain, perhaps extravasation of blood into it, etc. The patient, who felt particularly well in other respects, was put on short commons, cupped, and given laxatives, and, after a few days, had a seton applied. His hearing did not improve, but he became bodily and mentally more and more reduced. After a few months I was called in to see the man. After listening to his tale of distress I examined his ears, and found both passages completely stopped up with cerumen. I softened it a little, and removed it by injections. From that moment the man regained his hearing, and was cured not only of his deafness, but also of excessive melancholia which had taken hold of him since his "concussion of the brain." The ear-specialist closed his remarks with the following words: "Bear this case in mind, gentlemen, if you meet with patients presenting symptoms, which, even if only remotely, may have reference to the ear, and place yourselves in the position and condition of mind of the man so easily cured, after being tormented by deafness, melancholy, and the infliction of the seton, and, also, that of the otherwise able doctor,

after they had both been enlightened as to the true character of the supposed cerebral affection."

Ears, Running from. See "EAR, INFLAMMATION OF THE."

Ear, Syringing of the, see Index.

Ear, Trumpet, see "DEAFNESS."

Eat and Drink, When and How to, see Index.

ECLAMPSIA (Fits, Convulsions) are attacks of chronic spasms, cramp in the limbs, an affection limited to single muscular groups, or more generally affecting any muscle without distinction.

There are two forms of eclampsia; that of children, and that of women in confinement, which usually occurs about the time of delivery and, as a rule, in first confinements.

SYMPTOMS OF ECLAMPSIA WITH WOMEN IN CONFINEMENT.—In most cases violent and sudden convulsions (chronic spasm and cramp in the limbs) take place without any or with premonitory symptoms, such as a tickling sensation in the pubic region, head-ache, vertigo, palpitation of the heart, vomiting, etc. The patient, who is generally more or less unconscious, has fits of shivering for seconds and even minutes; she throws out her limbs in every direction; the head is jerked forward, backward, or to one side; the face swollen, red, or even blue; the breathing accompanied with a rattling noise; the look fixed; the jaws pressed firmly together; foam issues from the mouth with a hissing sound, etc., until finally the movements become weaker, and the patient falls into a totally unconscious state. Consciousness returns after some time, the sufferer is extremely exhausted, and cannot remember what has occurred. These fits recur, as a rule, and become more and more violent.

CAUSES.—Notwithstanding that this malady generally attacks strong and robust women, still the predisposition to it lies in a sensitive nervous system, also in renal diseases, anæmia or hyperæmia, hysteria, etc.

SYMPTOMS OF ECLAMPSIA IN CHILDREN (AND INFANTS).—It occurs as a rule during the first months, and suddenly, either without any premonitory symptoms whatever, or with them, *e. g.*, depression, etc. In most cases may be observed restless sleep, broken by convulsions of face and limbs, rolling the eyes, and rapid changes in the color of the face. Then the child's limbs suddenly stretch to their full length, and muscular convulsions of one or both sides of the body follow in rapid succession, the face gets red at the same time, the mouth foams, the facial muscles are twisted into something like a smile, the extremities appear to be permanently bent inward, and the thumbs are turned in.

These fits last from fifteen minutes to several hours, and usually end in a profound sleep. In violent fits consciousness is completely gone, and the symptoms are then similar to eclampsia of women in confinement. Boys more frequently suffer from this malady than girls.

CAUSES.—Eclampsia may be due to congenital predisposition, or occur in connection with other diseases, such as whooping cough, measles, scarlatina, gastric and intestinal catarrh, and most affections productive of cerebral anæmia or hyperæmia. Again, faulty nutrition, teething, worms, violent impressions on the senses, drinking the mother's or nurse's milk, after such persons have had a fright, or after a fit of temper.

TREATMENT.—Tepid (72°), wet rubbing of the whole body with the bare hands, followed by a three-quarter steam-bath in bed (duration only from an hour to an hour and a half), until gentle perspiration sets in, after which the patient is unpacked, and another wet rubbing of the whole body given. This treatment may be repeated two or three times a day, or a warm bath (93° to 96°) for five or ten minutes, followed by douche (82°). At night abdominal compress, and (86°) enema in the day-time, and also massage of the stomach. With it fresh air, open bowels (by enemata, if necessary), as well as application, see Index. See also "CRAMP" in Kneipp Cure.

With infants gentle friction or abdominal compresses as well as enemata may be safely given, but with older children the above treatment should be applied.

Eczema Capitis, see "FAVUS," see also Report of a Cure in "DIPHTHERIA."

Eczema Rubrum, see "SKIN DISEASES."

Egg, Dishes, made of, see "DIET, MIXED."

Eggs, Scrambled, see "DIET."

Egg Soup, see Index.

Elderberry Cure, see Index.

Elderberry Tea, see Index.

ELECTRICITY is a mode of motion, and is regarded as the fundamental activity of all force. Man's vital force is attributable to the operation of electricity. The nervous system is the life-giving element which has its point of egress in the brain and in the spine (the latter might not inaptly be called the ventral brain). Electric force is called into being by the joining of two opposite poles. It is to be observed throughout nature generally that it is the characteristic of any and every

object to be the result of the union of two opposites; male and female, positive and negative, north pole and south pole. If this idea of union be described as "Electricity," we gain an explanation in its widest sense. Every organ of our body, every muscle and vein is connected with the fine nerve-filaments, which are the connecting electric wires between all parts of the body and the prime source of all mental functions.

All activity in the body is called forth by electricity, thus also nutrition, secretion and the building up of all tissue is accomplished by the attracting and repelling, positive and negative action of electricity. Our mind is able materially to influence this activity, by means of which we are enabled to control many of our morbid feelings.

Research in the field of electricity is not by any means yet exhausted; the expectation is that it will play an important part as a therapeutic agent in the near future. We cannot too strongly advise the exercise of great caution in the present treatment by electricity as adopted by physicians and electricians. For the cure of diseases, strong electric currents applied by rule and measure as it were to a patient's weak nerves may do far more harm than good.

The modes of electric application consist in the constant current, the interrupted (faradic) current and the electric bath. The electric current is generated by currents produced by cells placed beside each other and connected by wires. The elements are composed of different metals and fluids possessing different degrees of electro-motive force. The best known are those of *Grove, Daniell, Bunsen, Siemens* and *Leclanche.*

The current is established by connecting the first with the last element by means of copper-wire. Electrodes, metal plates, balls, brushes, and hardened charcoal used for the introduction of the electric current into the human body, and they are connected with the elements by metallic wires covered with gutta-percha or silk and by metal clasps or pegs. The electrodes, supplied with wooden handles, are, by reason of the enormous power of resistance exercised by the dry human skin, moistened with and dipped in salt water for the purpose of obtaining more powerful currents. At the copper pole (the positive) is the anode, at the zinc pole (the negative) the cathode, inducing which introduces more powerful currents into the body. A distinction is made between opening and closing vibrations, as well as between ascending and descending currents. Thus it is called a descending current, when the anode (the copper pole) is applied above at the neck, whilst the cathode (the zinc pole) is applied to the loins, and an ascending current when the two are applied the reverse way.

METHOD OF APPLICATION.—One of the electrodes is applied to some not very sensitive part of the body, such as the back, etc., the

BATHS AND TREATMENT WITH ELECTRICITY.

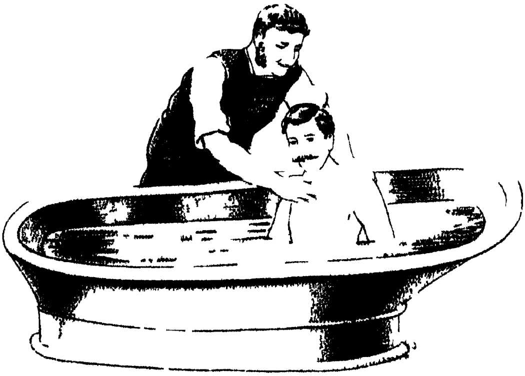


Fig 1 Fullror shallow bath



Fig 2 Hip bath

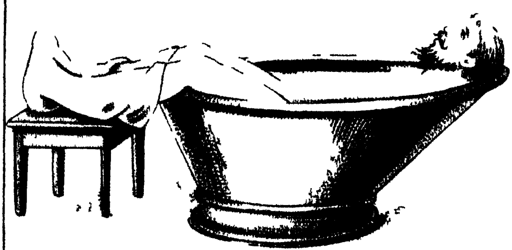


Fig 3 Trunk bath

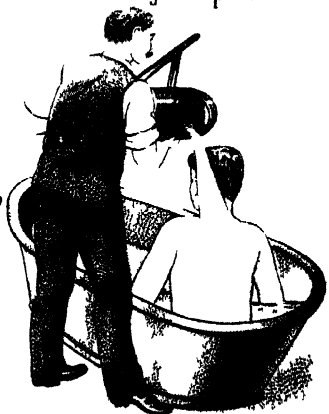


Fig 4 Back affusion in bath



Fig 5. Treatment with Electricity

EXPLANATION OF PLATE "BATHS AND ELECTRICAL TREATMENT."

FIGURE 1. The **TUB-BATH** is generally given at a temperature of 24° to 25° R. For persons unused to bathing 2° to 3° higher. For a rational care of the health regular bathing is very essential, and every person who wishes to protect himself as much as possible against disease should take at least one or two such tub-baths weekly. If this is not possible, it is advisable to take regularly sponge-baths of the whole body with water of 18° to 24° R., in order to maintain a brisk activity of the skin.

In the treatment of disease the tub-bath is generally used after entire packing, bed or chest steam-bath. It also has a good action in the treatment of fever. Here the temperature should be according to the general condition of the patient 24° to 27° R., and the latter is allowed to remain in the water until he is cool under the arms. During the bath the whole body is lightly rubbed and water poured a few times over the upper part of the body. Thereupon the patient is put to bed without being dried, so that the water evaporates, whereby the pores of the skin are best opened, warmth withdrawn from the body and an even distribution of the blood effected. For further explanation see index.

FIGURE 2. The **HALF-BATH** serves to draw the blood from the upper vital organs to the abdomen. It has an excellent effect in congestion of blood toward the brain, in eye, throat, heart, kidney troubles, etc. Its action is to bring blood to the abdominal organs, and it is, therefore, an excellent remedy for digestive disorders, stomach, intestine and liver diseases. It is also used with the best success in the various female and venereal diseases, as shown in the articles treating upon these diseases. Its duration is, according to the temperature, either very short (½ to 1 minute in cold half-baths, 45° F., 5 to 15 minutes in mild ones of 60° to 80° F.). A hot hip-bath has an anodyne action in cases of colic, gall, kidney and bladderstones. For further explanation see index.

FIGURE 3. The **TRUNK-BATH** is an improvement of the hip-bath. It is used to strengthen the abdominal and thoracic organs. It renders good service in cases of throat catarrh, brain, ear and eye affections, as also in congestion. Its action is stronger than that of the half bath and it is, therefore, to be used by healthy persons.

Temperature, 65° to 80° F.; duration, 5 to 15 minutes. The feet, which project from the bath, should be protected from becoming cold.

FIGURE 4. **POURING WATER ON BACK WHILE IN BATH** is generally done with (a few quarts) water which is 10° to 20° F. colder than the bath-water. This has an excellent action for strenghtening the lungs, in cases of old bronchial catarrhs, croup, throat and larynx affections, as also in congestion toward the head. While the water is being poured the patient should rub his breast with cold water.

FIGURE 5. **ELECTRICAL TREATMENT** must be carefully adapted to the constitution and disease of the patient. The galvanic current has a good, sedative and anodyne action in cases of nerve pains and over-excitement. The faradic current is used where it is desired to produce an exciting, stimulating and rubefacient action. In the use of electricity great precaution is necessary, as it is often used in too strong currents and without an exact knowledge of its action. It should, therefore, be entrusted only to experienced persons. Electricity is especially effective in cases of paralysis, spinal-cord troubles, neuralgia, etc.

other is applied to the seat of the pain, or, in case the latter should be of considerable extent, the electrode is passed slowly over it, (see colored plate No. V, fig. 5) or along the course of the painful nerve. The galvanic current is also employed as a strengthening agent. The strengthening action depends upon the principle that exhausted muscles are rendered stronger and more capable of performing their functions after the constant current has been passed through them. The same effect has been observed after the application of the faradic (interrupted) current. The latter, however, is not well borne by everyone, nervous persons in particular are easily over-exited by it; the constant current is, therefore, usually preferred when a strengthening action is aimed at. Finally, the constant current is employed, when chronic inflammatory products are to be removed or absorbed. This absorption is due, in the first place, to the dissolving action of the current on the tissues, and, secondly, to its mechanical action, whereby the inflammatory matter is eliminated; this is caused by the stimulation of the vasomotor nerves, which produce an alternate contraction and dilatation of the blood vessels, and, consequently, an acceleration of the circulation in the affected parts. The faradic current is principally employed as a stimulant and for the following purposes:

1. As a stimulant to the muscles and motor nerves. It is employed particularly in paralysis and atrophy of the muscles, and also with good results in general muscular weakness in consequence of insufficient nourishment. It has also been found very efficacious in weakness of the muscles of the stomach and intestines with consequent sluggish action of the bowels and constipation.

2. As a stimulant to the nerves of sensation. Deficient or even absent sensibility of single parts of the body can be cured or at any rate improved by the faradic current. Such cases require a somewhat different mode of treatment. Instead of the ordinary electrode, a brush of steel wires is applied to the affected part; it is pressed on or over the spot. The electricity is communicated to the skin through each wire, and a specially powerful stimulation is thus produced.

The interrupted current is used chiefly for the cure of paralysis, and the constant current for the cure of neuralgia, neurasthenia, anæsthesia, hysteria, hypochondriasis, tabes dorsalis and other spinal disorders, Basedow's disease (by galvanizing the sympathetic nerve), disorders of nutrition, atrophy, psychosis, (functional, not organic) disorders of the brain, diseases of the organs of sense, abdominal complaints, and diseases of the female sexual organs. The reader is also referred to the articles on magnetism and magnetization. One of the mildest modes of

the application of electricity is electric massage, practiced, alas! now-a-days by very few physicians, but always with excellent results.

Electric Light Baths. In place of sunlight, the electric light has of late been frequently employed in the treatment of diseases, and with good results. As we have comparatively few sunny days in Germany (about 120 in the year or one in three), and as sunbaths in the open air can only be taken during the warm season, electric light baths are a very practical substitute. They can be administered in winter and summer, by night as well as by day. Above all the dose of radiant heat and light can be exactly regulated. The electric incandescent light baths are the invention of an American doctor in the Battle Creek Sanatorium, Michigan. Dr. *W. Gebhardt* became acquainted with them in 1890, and having convinced himself of their physiological and curative efficacy, introduced them into Germany. Dr. *Gebhardt* is entitled to the credit of having substituted for the incandescent light the arc-light, which much more closely resembles the light of the sun. We have now, therefore, electric incandescent light baths and electric arc-light baths. The incandescent light bath, to be taken seated, consists of a

Electric ray apparatus of Dr. W. Gebhardt, Berlin.

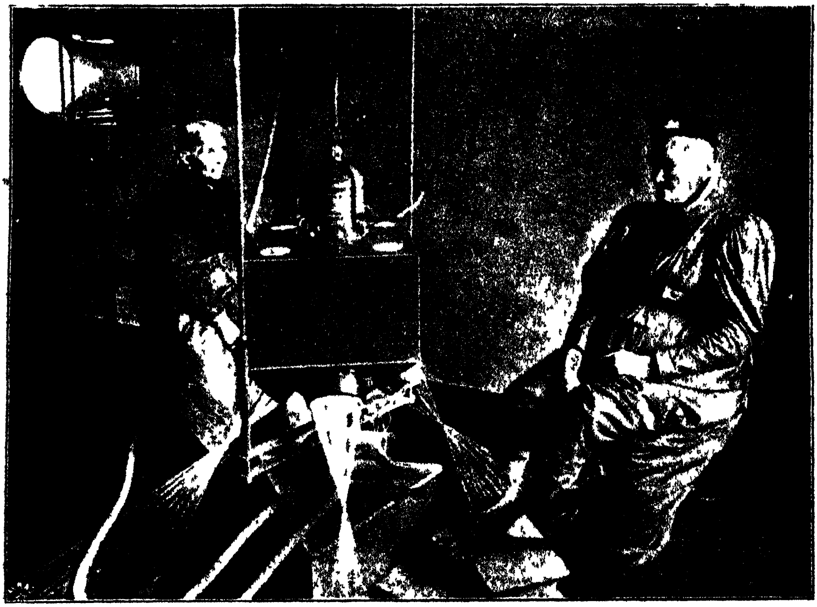


Fig. 115.

hexagonal box, the sides of which are covered with mirrors, and provided with about fifty incandescent lamps. In the middle of the box is a revolving stool for the patient, whose head projects through a hole in the lid of the box, as in a box steam-bath. In the lid are also a thermometer for the purpose of controlling the temperature, and a pane of glass through which the patient's body can be observed when the box is closed. The electric light bath intended to be used for patients lying down is arranged in a similar manner, but is longer, and the patient lies on a

Electric ray apparatus of Dr. W. Gebhardt, Berlin.

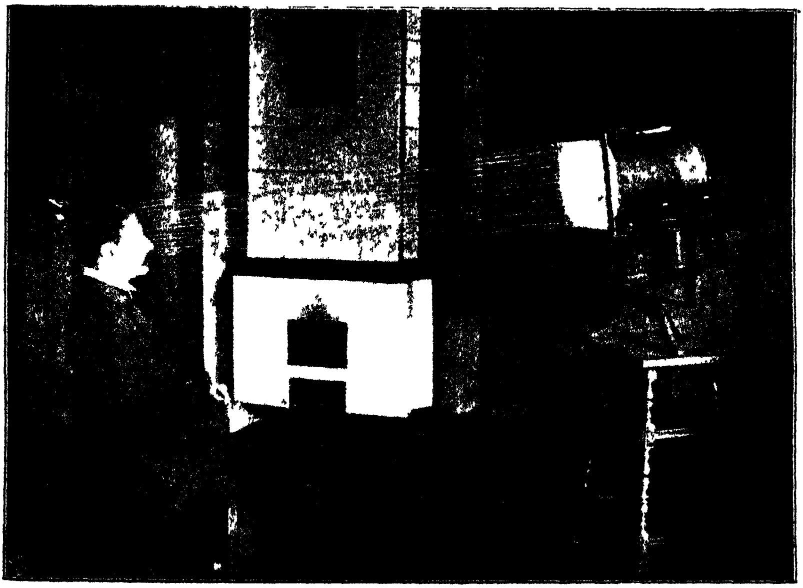


Fig. 116.

couch of basket-work through which the perspiration drops into a vessel on the ground and is collected for examination. The head rests on a support and projects through a hole in the end of the box. The arc-light baths already mentioned are arranged in the same way, except that the light is provided by four arc-lamps, one in each corner of the box and each of about nine ampères. The temperature is gradually raised, in some cases to 117° or even higher, and a copious and beneficial perspiration rapidly ensues, usually when the temperature has reached 100° to 130°. Besides Dr. *Gebhardt's* establishment for light-treatment in Berlin, electric light baths are used in various sanatoriums in Germany, nearly all of which are devoted to the natural method of healing, with

excellent results. The copious perspiration promotes increased assimilation, hence electric light baths are specially efficacious in gout, asthma, rheumatism, diabetes and other morbid conditions originating in impaired assimilation. They are also used with success in eliminating the poison of various diseases, such as syphilis, etc.

The copious flow of blood to the surface of the body taking place during the electric light bath and shown by the redness of the skin,

Electric light bath as used in the Bilz Sanatorium (open).

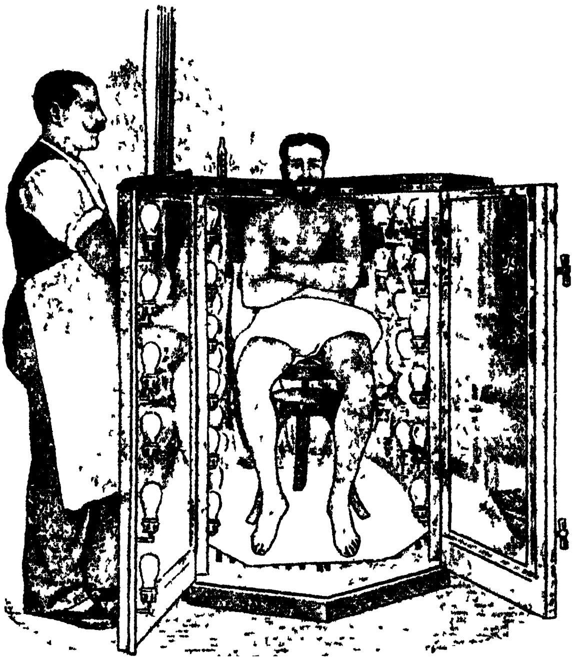


Fig. 117.

naturally tends to relieve the congested internal organs, as well as to the absorption of effete morbid matter. All the instructions given for the employment of sunbaths also hold good for electric light baths. After a light bath a cooling water bath should be given, gradually reducing the temperature of the same to 77° or 73°, also cold affusions to the back, knees and thighs. Light general massage is also advisable. An essential advantage of electric light baths over other sweating baths (hot-air baths, steam-baths), is that they can be taken with safety by patients suffering

from disease of the heart, whereas the other sweating baths have to be forbidden in such cases.

A further advantage of these baths over steam-baths (Russian or Turkish) is that the head remains free, and that the pressure exercised by steam and condensed water on the pores of the skin is avoided. Whereas the evaporation of the perspiration from the skin takes place with difficulty in an atmosphere already saturated with the vapor of water,

Electric light bath as used in the Bilz Sanatorium (closed).



Fig. 118.

the air in the electric light bath is entirely dry. Light baths have a stimulating action on the nervous system, and tend to strengthen the constitution notwithstanding the copious perspiration; they constitute, therefore, a valuable tonic for healthy people. Light is moreover a valuable curative agent. The similarity between electric light and sunlight is well known. The beneficial influence exerted by sunbaths on various morbid conditions of the system is not due solely to the action of heat and the consequent production of perspiration. It has been

proved that light plays an important part in this process, though the manner of its operation is still obscure. Here we have another advantage of electric light baths over steam or hot air baths Dr. ***Gebhardt*** has used a concentrated form of the electric arc-light locally with good effect, and has performed remarkable cures in this way, especially in obstinate cases of lupus, old ulcers, skin diseases of various kinds, and sexual disorders He has constructed a special apparatus for this object.

Electric-bath as used in the Bilz Sanatorium.

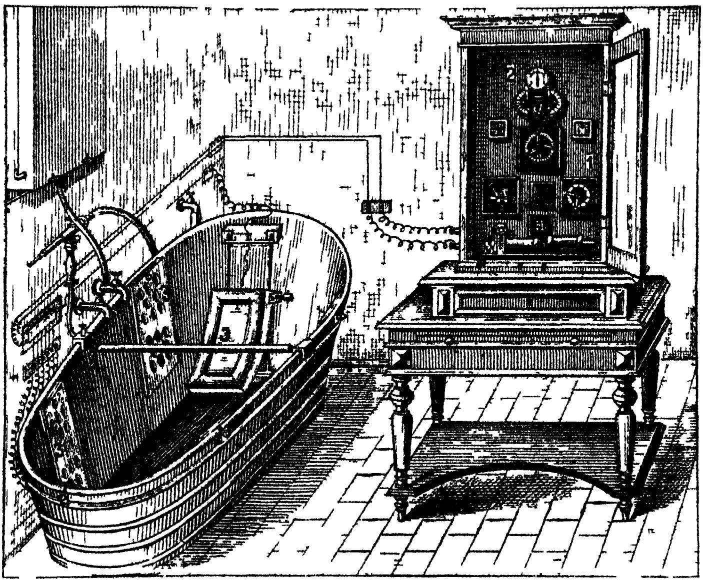


Fig. 119.

1) Rheostat or resistance coil for the current in the electric bath. 2) Galvanometer. 3) Electrodes in bath.

A Danish physician, Dr. ***Finsen,*** of Copenhagen, who has successfully treated many cases of lupus by blue cold light, has several times received considerable sums of money from the Danish Government for the further development of therapeutics of light. In view of the successful results of treatment of diseases by the electric light, we may look forward to a great future for this system wherever it is adopted.

Electric Water-bath. A special manner of applying the galvanic and faradic currents is the so-called "electric bath." See Fig. 119.

A wooden bath-tub is furnished internally with large electrodes in different parts and through them the current is conducted to the water. The current passes through the water and the body of the bather. In this way it is possible to expose the whole body or single parts of it to the action of electricity, according to the number of electrodes employed. Brilliant results have been obtained by this method, especially in the treatment of various forms of general nervous weakness (neurasthenia), also of spinal disorders, piles, and especially of impotence. Many successful cures of the above mentioned disorders have been made by the skilful application of these baths in the Bilz Sanatorium. The third form of electricity, also used for curative purposes, is static electricity, or franklinization. This form of electricity, unlike the other forms, arises directly from friction, and is produced in a special apparatus (Fig. 120). The patient is seated on a chair insulated by being placed on a stand with glass feet, to which one pole of the current is conducted. As the electrical communication with the earth is cut off by the glass insulators, the patient is in this way charged with electricity. The other pole, usually in the form of a large or small plate, is then brought near the patient. An exchange of the two kinds of electricity, in the patient and in the second pole respectively, now takes place; this is felt like a gentle breath of wind, and has a highly soothing and refreshing effect on the patient. Static electricity has proved of great benefit in the treatment of headache, megrims, nervous pains, hysteria, paralysis and nervous insomnia.

Electric machine for frictional electricity used in the Bilz Sanatorium.

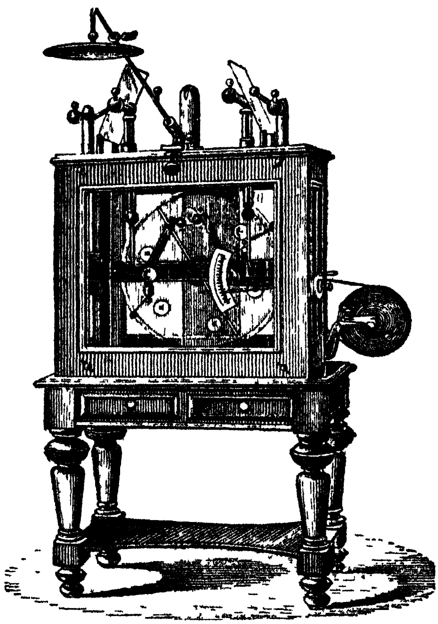


Fig. 120.

The cost of this machine is unfortunately too high to make it serviceable for general home use; but it should never be absent in any well-appointed sanatorium.

Electric Cooking Utensils (*Helberger's* patent). Notwithstanding that electrical stoves and cooking utensils of best quality are still very expensive, I add a few diagrams with description and price.

Electric Cooking Utensil (ordinary pattern).

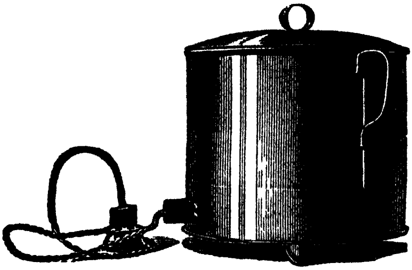


Fig. 121.

Will boil 5 quarts in 20 minutes, using an electric current of 12 ampères. Price, 30 Mk.
Will boil 8 quarts in 20 minutes, using an electric current of 20 ampères. Price, 35 Mk.

Electric Cooking Utensil (more elegant pattern).

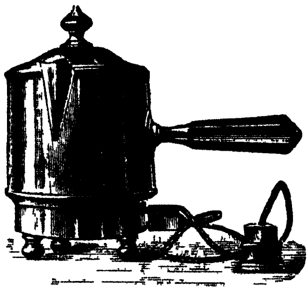


Fig. 122.

Will boil about 1 quart of water in 12 minutes by using an electric current of 5 amp. Price, 28 Mk.

Electric Cooking Apparatus.

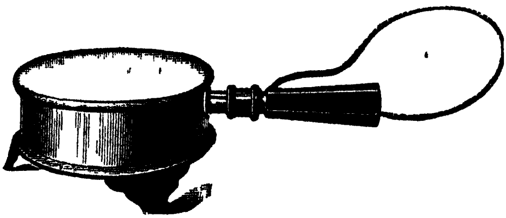


Fig. 123.

Electric Cooking Utensils with Saucepan.

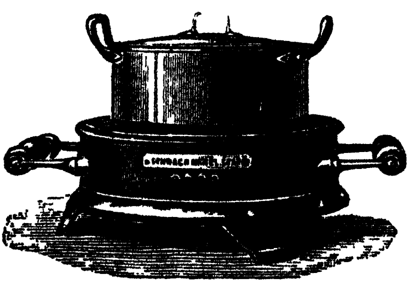


Fig. 124.

Ditto, with Tea-Kettle.



Fig. 125.

Electric Cooking Stove.

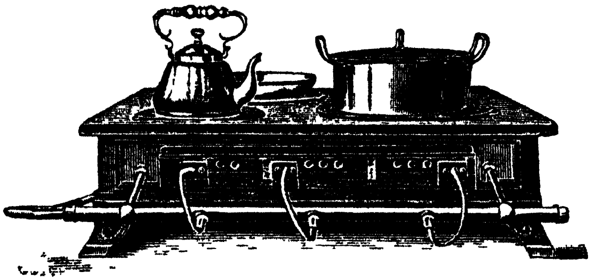


Fig. 126.

Stove with 1 oven, 3 plates,
3 openings, using an electric current of 20 ampères
Price, 360 Marks, complete.

Electric Stove.

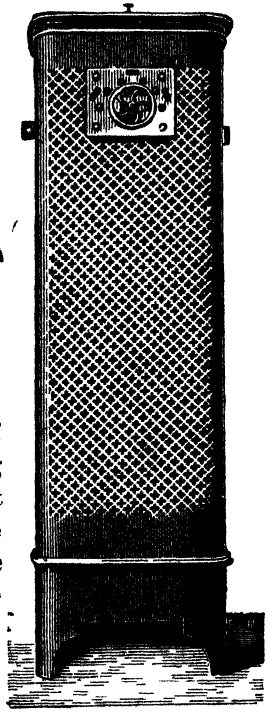


Fig. 127.

For all these cooking utensils a tension of from 100 to 110 volts is necessary. These cooking utensils can also be supplied with an arrangement for regulating the current, so that the latter be reduced, if desired, to about one ampère for the purpose of keeping the dishes warm, in which case the price is about 3 Marks higher.

Ordinary pattern,	10—50	Amp.	130	Mk.,	inclusive	stationary.
Copper, polished	10—50	"	160	"	"	stationary.
Ordinary pattern,	10—50	"	155	"	"	portable.
Copper, polished	10—50	"	185	"	"	portable.

ELF LOCK (Plica polonica). The Latin name of this malady is due to the fact that it is chiefly met with in Poland and on the banks of the Vistula.

It is a kind of eczema, which is caused or aggravated by want of cleanliness and attention to the hair of the head, often in a very dirty, filthy state and which, by reason of suppressed excretion, causes the hair to get matted together with masses of viscous mucus.

The same sickening condition is also brought about by wearing too warm caps, by which normal excretion is impeded.

Symptoms.—Formation of pustules and small ulcers between the hairs. A malodorous matter is also excreted by the tallow glands of the skin, combined sometimes with body exudations. These cause the hair to stick to the roots and afterwards to mat together higher up, so as to make

it impossible to use a comb. The symptoms are ill humor, general lassitude, headache, restless sleep, offensive breath, disordered digestion, etc.

TREATMENT.—The best plan is to cut off the hair in order to restore exhalation. Most scrupulous cleanliness by applying local washes after which the head must be well dried. Vegetarian diet, breathe fresh air, and pay the greatest attention to cutaneous action. Wear light or, better still, no headgear at all.

Steam-baths in bed, three or four a week, followed by lukewarm (87°) bath with head affusion, or wet rubbing of the whole body and head steam-bath two or three times a week instead. Abdominal compress during the night and derivating enemata. For Modes of Application, see Index.

EMACIATION may appear in various conditions of disease, it not being at all necessary that the malady should be phthisis, or so-called consumption.

CAUSES.—Irregular nourishment, accumulation of phlegm in the lungs, stomach, or intestines, brought about by degeneration (induration, tumor) in the organs of nutrition, such as the stomach, spleen, liver, etc., the result being that a due proportion is not maintained between eliminated matter and food taken, and consequently general decay of the body takes place. Emaciation in little children is, however, generally caused by faulty diet and lack of fresh air, sometimes also by over-feeding, for in matters of diet too much is as injurious as too little, a maxim of general application in hygiene. Emaciation is generally accompanied by diarrhœa.

TREATMENT.—Strengthening treatment: in children particular attention must be paid to the removal of the above causes. For consumption, see "TUBERCULOSIS."

A non-stimulating diet, in which ripe, fresh or dried fruit forms a large item in every meal; a bath or wet rubbing of the whole body daily, plenty of fresh, pure air and sunshine, and exercise in the open air; deep and full breathing (to effect expansion of the thorax) and sleeping with open window may often save a consumptive patient, and, if the treatment be persisted in for some length of time, effect a permanent cure.

MASSAGE as in strengthening treatment.

EMETICS, or how to produce vomiting.

A. Tickle the inside of the throat with a feather.

B. Rub the root of the tongue with a finger.

C. Insert a finger deep down into the throat, or drink a large quantity of lukewarm water, mixed perhaps with a little melted butter. See also "EMETICS" in "POISONING."

Emphysema, see "LUNG DISEASES."

English Cholera, see "CHOLERA NOSTRAS."

Enema (Enemata), see Index.

Enema Syphon, see "ENEMA."

Entozoa, see "PARASITES."

Enuresis Nocturna. See "BED, WETTING OF THE."

EPILEPSY (Epileptic Attack), is a sudden occurrence of unconsciousness and senselessness. In most cases the sufferer falls to the ground with a shrill cry; the eyes are fixed and wildly rolling, the fists are clenched, and the thumbs turned in, cramps, convulsions and paroxysms in all parts of the body.

CAUSES.—Predisposition is most frequently inherited, but the malady may also be engendered by self-abuse and excessive sexual intercourse in later years, fright at witnessing an epileptic fit in some one else, sudden grief, excessive pain, disturbances in the digestive organs, overloading the stomach, eating too much meat and indulging in fermented liquors in youth, etc. Those afflicted with this disease are warned to carefully avoid any one of these causes. Primarily, the humors of the body are in a morbid condition, whereby the entire nervous system becomes predisposed to a disease which takes such a deep hold.

TREATMENT.—Notwithstanding that this malady is considered incurable, it is nevertheless not hopelessly so. A strengthening treatment, carried out with all rigor, but moderate at the commencement, may often effect a perfect cure. Above all, free cutaneous action must be secured, a derivative treatment applied, and regular daily motions ensured by means of enemata. Single fits admit of no treatment. The dress must be merely loosened and care be taken that the sufferer does not hurt himself. We also warn against making an attempt to free the clenched hands, for every violent movement, as experience has shown, only leads to a speedier return of more violent fits.

The more detailed treatment consists of wet rubbing of the whole body (81°) or affusion (90° to 95°) by means of a watering can, or half an hour afterwards hip-bath (86° to 88°) for twenty minutes together with a foot steam-bath or a hot-water bottle to the feet, and finally a foot-bath in the water used for the hip-bath, the patient at the same time being douched with water (79°) from a watering can. In addition to this the patient must have one or two small enemata daily, and the abdomen be washed with water (73° to 77°) and he must tread water daily or go barefooted. Furthermore, the rules of strengthening treatment as

stated above are to be observed, especially as regards plenty of fresh air, non-stimulating diet, etc. Moreover, abdominal pack and calf-packs three times a week during the night are to be recommended.

Epileptic Fits. During a fit, *if the head is cool,* warm (not hot) soothing steam compresses on the head, back of the neck and pubic region, as well as a thick rolled-up steam compress on the feet (hot-water bottles would be injurious). Renew the warm compresses on the head occasionally. Place the head low, knead and press the neck (throat massage).

If the head is hot, apply cool compresses, or wet the head with cool water frequently and elevate the head. The feet are rubbed during the application of the thick hot compress with hands wetted in cool water. All the gymnastic exercises must not be done violently, nor for too long a time. Consequently the exercises must not be continued until the patient is tired.

TREATMENT BY MASSAGE. Kneading the neck, etc., slapping the back along the spine etc., in both directions and vibrations of the spine by means of the tips of the fingers. (Magnetic strokes.)

CURATIVE GYMNASTICS. There are perhaps no fixed modes of application for epilepsy, because the movements must be adapted to the patient's condition, nevertheless movements which act derivatively from the head are always beneficial.

KNEIPP CURE. Walking barefooted for some time every day, to harden the whole system. If the temperature is warm, treading water twice daily. Every night or on rising in the morning wash the whole body. Every day in warm water a partial bath, in cool weather every other day. Coffee to be avoided, but instead of it a thick soup morning and evening. Neither wine nor beer to be taken.

In this disease it is chiefly the magnetic treatment which produces the wonderful effects. See "MAGNETISM". For Modes of Application see Index.

CURE OF EPILEPSY.

(Falling sickness.)

Out of the abundance of the heart the mouth speaketh. Thus I too follow the promptings of my heart, when I proffer in brief words my little contribution in praise of the Natural Method of Healing, for not only have I recovered my health by it, but it has enabled me to retain my position in life, and thus ensured my advancement and the happiness of my family life.

The Natural Method of Healing may boast of a splendid triumph, as mine was not an acute, superficial disease, but a fearful chronic malady

of the nerves, and for a number of years defied every medicine which was prescribed by far famed and unknown representatives of allopathy, and on which these gentlemen in the end turned their backs with a shrug of the shoulders, seeing and acknowledging that the power of their extensive materia medica had here come to an end.

I am now thirty-one years of age, had suffered from epilepsy from my sixteenth year, that is to say, for fourteen long years I was persecuted by this malady.

It must, however, be mentioned that the fits came on every three months, incapacitated me for any work regularly for a fortnight, and did great injury to my mind and body.

At Erlau, where I was engaged, on the Saxon state railways, I had an opportunity of becoming acquainted with the Natural Method of Healing. A woman, who had sickened of the smallpox, and had been given up by the doctors, was afterwards treated according to this method, and from the very first day began to recover and is well and healthy at this moment. I never dreamt, however, that I too should find the relief so devoutly desired and vainly sought everywhere from the same treatment of diseases.

One of the higher officials, who had repeatedly been a witness of these terrible scenes, asked me whether I had not a mind to try this method of cure, as it was the only rational way to recovery, and had already often been crowned with success in cases of this very malady, while medicine could not even mitigate, much less cure it, but, on the contrary, aggravated it. My own condition and the experience which I had gained confirmed this assertion.

Although I was beset with doubts, and thought that there was no hope held out by this treatment, I made up my mind on the repeated representations of the official, like a drowning man who catches at a straw, to try this method, and I declared myself ready, as did also my wife, to go in for the full and complete treatment, even at the risk of its turning out a failure. After a conversation with the Natural Healer, Mr. *Canitz,* on the subject, the course of treatment was decided on and begun. Cool (70°) lavations and wet rubbing of the whole body, abdominal, trunk and foot-packs, foot-baths, cool enemata and non-stimulating diet made up the treatment. "Oh", said relations and friends often with a laugh, "there is no cure for your disease, least of all dabbling with water." But I, on the other hand was encouraged and spurred on by my adviser not to flag in my purpose, since only by perseverance could a favorable result be attained. Thus passed nine months without a fit. Although my hopes and those of my wife were somewhat shaken by a fit which I

had at this time, still the circumstance helped to encourage us that the attack was considerably less violent, that I had recovered complete consciousness in about five or ten minutes, that there was no repetition of the fit, and that I could next day attend to my duties again without experiencing lassitude, whilst before I had been unconscious for several hours and half the night with the well-known symptoms, when there were two or three repetitions of the fit, and, as I already mentioned, I was for from ten days to a fortnight incapacitated from work.

We began anew every other day the trunk and foot-packs, cool wet rubbings and cool enemata, and continued this treatment for about a twelve-month. After that time we reduced the packs gradually to one a week, and the lavations to two or three a week, and a year and a half has now gone by, during which time I have been perfectly free from fits, have always enjoyed the best of health, and am firmly convinced that I am released from this terrible malady.

Thus much has become clear to me during my fourteen years' treatment with medicine, that the only result of powders and pills is to make us ill and wretched.

Waldheim. *Gottfried Ernst Streubel.*

CURE OF EPILEPSY.

(Falling sickness.)

I had suffered from my childhood from cramp-like nervous convulsions, and for the last twelve months from epilepsy to such an extent as to fall to the ground and be seized with fits as many as four times in one day. After various useless courses of treatment in other places I underwent a two months' treatment in the Albertsbad Sanatorium near Chemnitz, which is conducted on the principle of the Natural Method of Healing, and, thanks to the untiring efforts, the most careful attention, and the warm, hearty sympathy of Dr. *Meyner*, I am again happy and sound as a bell to-day, and without any return of the fits. I can only recommend Dr. *Meyner* and his institution most warmly to every sufferer. *Georg Dittmeyer*, engraver, Chemnitz.

ERGOTISM (Poisoning by Ergot of Rye), arises from eating rye bread which contains a quantity of ground ergot of rye, such as is frequently produced by wet seasons.

SYMPTOMS.—Diarrhœa with frequent vomiting, attacks of colic and vertigo, trembling, pressure on the stomach, nausea, sick headache, failing sight, stupor, paralysis and convulsions (the latter are generally preceded by formication), pains in the joints, particularly pain in the

cardiac region and in the back, nervous convulsions, sometimes also fever.

With these characteristics is coupled in some cases mortification of fingers, toes, legs, hands, upper-lip, nose etc.

Treatment.—Remove the cause, *i. e.*, desist from eating bread which contains ergot of rye. If the poisoning has only lately occurred, produce vomiting at once by drinking quantities of tepid water, mixed also with some butter or by tickling the gullet, etc., to get the poisoned food of the stomach. A cleansing out of the stomach performed by an expert is the most efficacious remedy. The poison remaining in it must be rendered innocuous by drinking oat-meal or linseed meal gruel, or decoctions of tannin. Next, stimulating packs or steam-baths in bed (No. 1) with well-wrung extra compresses on the stomach, followed by a lukewarm bath (88°) or tepid wet rubbing (73°) once or twice daily.

A stimulating abdominal compress at night, with wet rubbing in the morning, non-stimulating diet, fresh air and occasional enemata. For Modes of Application see Index.

ERUCTATION. An accumulation of gas in the stomach frequently takes place in consequence of partaking too freely of carbonaceous, fermenting food, such as sauerkraut, confectionery which contains a great deal of yeast, beer, etc., or food-stuffs rich in starch and sugar. These gases are expelled, with or without any food and drink, either by eructation into the mouth, or by breaking wind. If neither happens, flatulence is the consequence. The causes are eating too much or too fast (imperfect mastication) especially of such food-stuffs, as are mentioned above.

Treatment.—Light, appropriate, easily digestible food. Masticate slowly and well. Dry nourishment, or such as has been boiled to a jelly. Do not drink anything at meals, or immediately afterwards. Promote open bowels by means of enemata, and aid digestion by nightly stimulating stomach compresses. Eructation may be stopped temporarily by a mouthful of very cold water. A cup of fennel or aniseed tea or of both mixed is beneficial. If eructation accompanies certain diseases, such as gastric catarrh, affection of the peritoneum, hysteria, or after violent hemorrhage, the treatment of the accompanying disease must be taken in hand.

Similar to eructation is hiccough, which may be removed by taking a full deep breath, and a mouthful of very cold water. To infants affected by it principally from lying cold or wet for some time, relief is soon afforded by changing the wet napkin for a dry, warm one. For Modes of Application, see Index.

ERYSIPELAS is a bright, superficial redness of the skin arising suddenly and disappearing upon pressure with the fingers, re-appearing, however, immediately when the pressure ceases. It is apt to move from place to place (erysipelas ambulans).

SYMPTOMS.—Erysipelas is commonly preceded by cold shivers and fever characterized by a desire for sleep and setting in with nausea or vomiting. If the affection be of mild type, the fever will disappear when erysipelas shows itself; in severe cases it appears with great violence and continues after erysipelas has set in. Erysipelas is usually attended by heat, violent irritation. stretched and swollen skin, as red as fire, often tinged with blue, more or less painful, frequently accompanied by pricking pains. Sometimes blisters appear on the skin. Acute catarrh of the gullet and stomach is often associated with it, also thickly farred tongue, loss of appetite, pasty taste in the mouth and offensive breath.

The swelling of erysipelas generally increases for a few days, then remains stationary for some more, and both swelling and fever disappear in from eight to twenty days, the skin gets wrinkled, and exfoliates in large or small quantities, or else abscesses and furuncles are formed. Erysipelas now and then passes into suppuration, and may then lead even to pyaemia. Or in very severe cases, especially in erysipelas of the hand and face, cerebral symptoms may supervene, such as delirium, meningitis, nephritis, etc.

The greatest care is absolutely necessary in all these cases, as well as the very best treatment, otherwise death may very likely result.

CAUSES.—Contagion, suppurating places purulent discharge of which is impeded, stings from insects, taking a chill, particularly in some overheated part of the body, or in spring and autumn; a peculiarly sensitive condition of the stomach with some people, shown *e. g.* when eating crabs, mussels, strawberries, honey, etc., or unwholesome food, such as stale fish; suppressed menstruation, hæmorrhoids, and imperfectly healed ulcers. Erysipelas of the face may originate from abscesses in the nose or caries of the teeth. It may attack any part of the body.

ERYSIPELAS OF THE HEAD AND FACE is always attended with fever, and at times with pains in the neck, head or ear. It generally arises on one cheek, one ear or the nose, spreading from the original point rapidly over the whole face as well as over the hairy portion of the head. Vesicles or pustules, especially on the cheeks, forehead and ears, are frequent symptoms.

ERYSIPELAS AMBULANS, appearing usually on the limbs, does not stay at the spot which was first affected, but passes to some adjoining part such as the head or body.

VESICULAR ERYSIPELAS is characterized by the formation of pustules.

ERYSIPELAS OF THE BREAST is also preceded by fever in those parts, or erysipelas of the face may take a course from the chin and spread over the whole forepart of the chest, especially the breasts, which afterwards swell, become hard and exceedingly painful. Suppuration is also liable to occur here. The pains sometimes extend to the armpit of the affected side.

The inflamed breast of women who are suckling frequently partakes of the nature of erysipelas.

ERYSIPELAS OF THE STOMACH sometimes attacks exactly half of the body at the umbilical region, extending like a belt from the spine to the middle of the abdomen, often without fever. Red, burning, irritating pustules often appear which are filled with fluid.

This variety seems to combine the characteristics of erysipelas, a something between that and herpes (see also "HERPES") and is frequently very obstinate. It does not spare the sexual parts, where it may assume large proportions, passing quickly to mortification; this is frequently the case with new-born infants.

ERYSIPELAS OF THE ARM is occasioned by wounds and other local injuries; frequently, however, it is a continuation of erysipelas of the head.

ERYSIPELAS OF THE LEG occurs very often with old and sickly people, often resulting in these cases in painful abscesses of the foot, and passing very frequently into ulceration.

CONDITIONS, WHICH ARE ESPECIALLY FAVORABLE TO ERYSIPELAS, ARE: A delicate white skin; women and young people being, therefore, particularly liable to the disease. In old people erysipelas is usually confined to the feet.

Secondly:—Obesity.

Thirdly:—Choleric temperament, especially when combined with a very irritable, morbid liver.

TREATMENT.—In every form of erysipelas (even the vesicular variety) take simple linen, moderately wrung out in lukewarm (82° to 86°) water; put it on the affected part, and leave it there all the time. Over it put a piece of linen, folded several times and moderately wrung out in tepid (69° to 73°) water, the whole to be covered with dry flannel. The latter should be changed on getting hot (every ten or fifteen minutes). At night a somewhat thicker compress is put on the diseased part, remaining there till perspiration wakes the patient from his sleep, when it is

renewed, or the above treatment repeated. The disorder generally subsides in about ten days.

In erysipelas of the head tepid (73° to 77°), stimulating three-quarter packs (moderately wrung out) are to be added to the above applications (duration, an hour to an hour and a half). These packs are continued (often six or eight of them in succession) till the fever ceases.

In lighter cases, also, full or three-quarter packs, with extra compresses on the inflamed parts, may be applied.

For erysipelas of the face the affected part should be soothed by bathing with tepid water, since, of course, a compress can not well be applied.

The pustules in St. Anthony's fire and vesicular erysipelas must not be pricked; they disappear again of themselves. In erysipelas of the head, instead of the three-quarter pack (in which always a very hot-water bottle, wrapped in wet flannel, is placed at the feet) a partial steam-bath of from twenty to twenty-five minutes' duration may be applied. During the steam-bath compresses (77°) should be placed round the head and frequently changed, afterwards a lukewarm (88°) bath with head-affusion should be given. In erysipelas of other parts, besides the above, a steam-bath in bed No. 1 may be given every day for an hour, with thick extra compresses on the affected parts. In this disease a soothing treatment in the beginning, followed by a stimulating treatment to produce perspiration, is the correct method. It will soon be effectual. Vegetarian diet, pure air, fresh water and enemata. For Modes of Application see Index.

ANOTHER TREATMENT.—To ensure better secretion, one or two tepid (73° to 77°), wet rubbings of the whole body should be given daily, and compresses of the same temperature covered with flannel put on the inflamed part, and changed on getting hot or troublesome. At the same time also an (73° to 77°) abdominal pack with stimulating leg or foot-pack of from one and a half to two and even three hours' duration, according to circumstances, should be applied, followed by a wet rubbing of the whole body.

The bowels must, moreover, be kept open by enemata, and vegetarian diet, as before, adopted, with high fever, three-quarter packs (72°) of from one to one and a half hour's duration should be applied, followed by wet rubbing of the whole body.

By this treatment, too, the disease will take a favorable course. Some natural healers treat the disease by first giving the patient a partial steam-bath, or steam-bath in bed, followed by a bath and massage.

As erysipelas of the face is usually attended by fever, a lukewarm (81° to 86°) washing of the whole body must precede the steam-bath. But a treatment of this kind must always be taken in hand in the most careful manner, with an accurate observance of every condition (especially the pulse) by a professional man, as an error committed in the cooling of the system every time a steam-bath is taken, may cause the fever to rise, instead of being lowered. To employ an old woman or quack, etc., to treat erysipelas, a thing done even to-day to an incredible extent, is an entirely useless and highly ridiculous proceeding. Only a magnetopathist is justified in interefering here. Every penny and every moment of time spent on such foolery is utterly wasted. The cure is only retarded by it.

CURE OF ERYSIPELAS.

By Dr. Schindler, Natural Healer.

From the "Journal for Hygiene and Natural Therapeutics," communicated by Philo von Walde.

Towards the close of 1886, I called early one morning at five o'clock on Prof. *Ferdinand Busch* of Sorau, who was at the time in the Kunzendorff Sanatorium, near Graefenberg, Nieder-Lausitz, to say good morning to him. He was in bed in the most dreadful agony. His eyes and mouth were swollen, the latter to such an extent that he was unable to utter a syllable. His face and neck were purple. Dr. *Schindler* pronounced the case to be one of erysipelas of the face. The fact was that the good man always used to go about lightly clad and without a hat, whether in summer or in the depth of the severest winter and in the most horrible snow-storms. We were experiencing at the time quite a Siberian winter and he had caught cold. I stayed another day, and assisted in his treatment, as he was suffering from a fierce traumatic fever. Sponging with warm water (92°) was first applied, then abdominal, neck, face, and head compresses (73° to 86°), some of which were changed every five to fifteen minutes. A full-pack was given in the afternoon (duration twenty five minutes), succeeded by gentle, wet rubbing. Two full-packs with abdominal and neck compress, rubbing, etc., had the effect that on the fourth day the patient could, without harm to himself. take a letter of Dr. *Schindler* addressed to me to the post-office, and nobody would believe that he had been so ill. I certainly lost faith a little when Dr. *Schindler* said that he was positive that the patient would next day drink his usual quantity of milk, and the day after go to the castle to have his breakfast there, and I thought to myself, 'my dear Doctor, I know you can do a great deal, but this is a little too much, and, certainly, more than water can perform.' But it happened literally, as *Schindler* had prophesied. I have now learnt to know what it means to be a hydro-

pathist, like Dr. *Schindler*. The patient told me afterwards, that in Sorau he had had erysipelas every year, and had been down with it for six or eight weeks together; his pains on the present occasion were nothing, compared to those he had suffered previously when under medical treatment. My doctor, he said, will never believe that water can cure erysipelas in a few days. without leaving a trace behind. Exfoliation, etc., was entirely absent.

Eschar, see "FAVUS".

EXAMINATION, METHODS OF. To diagnose any malady the following mode of procedure is to be observed:—Enquire as to the health of the parents, brothers, and sisters of the patient, in order to ascertain, whether any disease is hereditary in the family. Then ask what diseases the patient has had, what course they took, and how they were treated. Then examine the whole body to find out the general condition of the patient, any accumulations of fat, and what state the muscles are in, as well as any apparent external morbid conditions (rashes, eruptions, deformities, swellings, etc.). Then feel the pulse and any organs that are easily accessible, particularly of the stomach, and then proceed to examine, by the ear, especially the organs of the chest, lungs, and heart. Skilled doctors generally examine by ear at once, placing the ear to the part to be examined. Others use the stethoscope. Further examination must be made by sounding especially the thorax and the organs of the abdominal cavity, because the sound in healthy organs is different to that of diseased ones. But long practice is necessary to be able to really distinguish, by sound, whether wholly healthy or more or less diseased organs lie under the abdominal or thoracic walls.

Sounding is generally done in the following manner:—One or two outstretched fingers of the left hand are laid over the region of the lungs, intestines, or stomach to be examined, then tap these with the middle finger of the right hand, or with the middle and forefinger (many use a so-called sounding mallet). Thus, by sounding and tapping, may be ascertained, whether the internal organs are diseased, and whether accumulation of gas, air, pus, water, etc., or enlargement of the organs is present (see also "DIAGNOSIS").

See also "EXAMINATION, METHOD OF, ACCORDING TO THURE-BRANDT."

EXFOLIATION generally takes place after eruptive diseases, *e. g.*, scarlatina, measles, etc., when the skin peels off in little flakes or scales.

See "HEAD, SCURF ON THE."

EXHALATION, CUTANEOUS, is the process whereby the used-up matter in the system finds an outlet through the pores of the skin. It does

not mean the secretion of matter with profuse perspiration, perceptible to the eye, but a gaseous exhalation of vapor, which is of greater importance.

Three-fourths of the human body consist of water.

For this see also "ASSIMILATION."

Exhalation is principally and essentially promoted by a warm temperature and by active exercises of the body. It is reckoned that an adult person loses above two pounds of water every twenty-four hours by evaporation.

Exhalation may, however, be morbid in so far as it exceeds normal conditions or secretes matter which discloses internal disease. The treatment must in such cases be adapted to the disease, which is the cause of abnormal secrétion.

Exercise, see Index.

Exhaustion, see "DEPRESSION."

EXHAUSTION is, as distinguished from excitement, the prostration of vital action, sometimes the sequel of unusual exertion or of tedious diseases; according to the causes, it may be but transient, of long duration, or permanent.

To relieve morbid exhaustion rest is necessary, with attention to mild cutaneous action, full and partial baths and wet rubbing of the whole body (66 to 77°) and above all, plenty of fresh air, very light food, later on a more nourishing mixed but non-stimulating diet. In more obstinate cases strengthening treatment to be applied for some length of time. (For Modes of Application, see Index. See also "PROSTRATION.")

Exomphalus, see "HERNIA."

Exophthalmica, see "BASEDOW'S DISEASE."

EXPECTORATION (Sputum), is the secretion, in a healthy person, of phlegm discharged from the mouth in moderate quantity, and of a harmless nature. But in proportion as a disease causes expectoration, this not only increases in quantity, but becomes different in appearance. It frequently becomes disgusting, if it is of a purulent character, and in this form even has an evil smell. The phlegm is sometimes mixed with blood, may proceed from various parts of the respiratory organs, and be the product of quite different developments of disease. The phlegm of persons suffering from phthisis generally contains decayed or dissolved portions of lung tissue which in consequence of their weight will sink in water.

TREATMENT.—There is none, since it will readily disappear with the illness causing it, at the most alleviation can be procured by breathing

a milder air, by repeated instillations of temperate water, or by taking a teaspoonful of salad oil and rubbing and stroking along the parts of the respiratory organs, as well as by stimulating trunk packs. (See Index.)

Extra Compress. See Index.

Extremities, see "LIMBS."

EXUDATION is a discharge of matter. Exudation which takes place in pleurisy, or pleuritis, or in affections of the abdominal cavity or pelvis is a discharge of matter from the blood into the thoracic cavity or into the abdominal cavity or pelvis. The matter is generally pale yellow like a mixture of water and blood, and is frequently purulent and in bad cases mingled with blood.

Eye and its Formation. See "THE MODEL OF THE EYE."

EYE, DISEASES OF THE. Blenorrhœa is a contagious inflammation of the eyes, and may be either the so-called Egyptian inflammation or catarrhal ophthalmia (blenorrhœa), or the ophthalmia of the newborn infants, the latter being caused by impure secretion of the uterus getting into the child's eyes at its birth and by these not being sufficiently well cleansed with pure water, when the child has its first bath. (See "EYES, INFLAMMATION OF THE.") Or it may originate with adults in direct transmission of mucous pus, etc., from eye to eye, or by infectious matter, *e. g.*, malignant discharge from the sexual parts reaching the eyes.

SYMPTOMS.—Sudden inflammation, swelling of the eyelids (the inflamed mucous membranes of the eyelid look as if they are covered with sharp pointed grains), great heat, mucous and purulent secretions in large quantities, fever and finally corneal opacity followed by formation of destructive ulcers.

CAUSES.—Besides those mentioned above: impure, dust-laden or raw air as well as influences of weather, injuries, pollution, infection, etc.

TREATMENT.—Lukewarm (80°) stimulating full pack every day for an hour and a half unless indications point to a different treatment, *e. g.*, presence of heart disease, certain affections of the lungs, etc. Next a tepid (90°) bath, also half or three-quarter steam-baths, or steam-baths in bed. Gargling every hour with a cupful of tepid (72°) water and every two hours tepid (80°) injections into the nose. Stimulating abdominal bandage (80°) about two to four hours a day, compress round the neck and throat (72°). These compresses to be kept on during the night. The eyes to be gently washed and dabbed with a soft little rag, dipped in tepid (80° to 88°) water, or delicately syringed (see EYES, INFLAMMATION OF THE"), then frequent compresses of the same tem-

perature on the eyes together with stimulating compresses on neck and throat or only neck. If there is fever with the ophthalmia in new-born infants, a warm (90° to 96°) bath to be given of from five to ten minutes' duration, then wipe the child dry, apply an abdominal compress of (86°), and put to bed. This treatment to be repeated if increased fever follows. With adults, on the other hand, full or three-quarter pack followed by (86°) bath, or any other fever treatment. Nor is the nightly abdominal bandage, which may be applied very wet, to be forgotten.

Fresh air, non-stimulating diet and enemata. For the rest we refer to the treatment in inflammation of the eyes, as well as to treatment of the eye in general.

MASSAGE as with inflammation of the eyes.

EYE, DISEASES OF THE. Black Cataract displays a paralysis of the retina or of the optic nerve itself, and this condition leads, as a rule, to total blindness.

TREATMENT, in accordance with the directions given below, is only of use in an early stage of the disease, whereas the developed black cataract is incurable.

Although a cure of developed cataract cannot be effected by means of the Natural Method of Healing, and an operation for the gray and green varieties of the disease is, therefore, ultimately imperative, it should not, however, be held necessary to have recourse to such an operation at the commencement; but an attempt should be made to counteract the process of obscuration, and that is only possible by regulating in a rational manner the process of assimilation, *i. e.*, paying proper attention to the action of the skin and adopting a non-stimulating diet (see "DIET"). Obscuration of the crystalline lens—an obscuration and diminution generally of the power of sight—originates in one of two ways: Either the process of assimilation in these organs, being, as in all the other organs of the body, constantly renewed from the blood, is arrested to such a degree as to fail to carry off the used-up articles, and to replace them by new ones, or the blood itself brings up impure foreign substances, which settle there and produce obscuration. It must be borne in mind that the system deposits injurious matter, which it has absorbed with food and drink, principally in those organs that have in some degree already become enfeebled and, more especially, when they are exposed unchecked to further exertions.

EYE, DISEASES OF THE. Green Cataract. The pupil has a greenish color, decrease of visual power takes place in one or both eyes, the eyeball feels hard and is considerably distended, Enlargement and sluggish action of the pupil. Dimness and, at last, opacity of the vitreous

humor sets in. A sensation of pressure, often of acute pain (also headache) is felt. The course of the disease may be very rapid, or slow and gradual. This disease is very apt to spread to the sound eye.

EYE, DISEASES OF THE. Gray Cataract. This produces dimness of the lens, of its capsule, or of the morgagnic fluid, and the pupil has a gray appearance. The power of sight decreases, till it becomes completely extinct.

EYE, DISEASES OF THE. Day-Blindness (Nyctalopy). The patient is able to see but faintly in the day-time, and especially in the bright sunshine, but very well at night, often better than others.

CAUSES.—Hereditary disposition. This affection is likewise a concomitant of several eye diseases, hysteria, etc.

TREATMENT.—Removal of the causes, as well as a treatment bearing on the original disease.

When hereditary, the complaint is usually incurable, as is also night-blindness.

EYE, DISEASES OF THE. Night-Blindness. In this affection the patient can see perfectly in the day-time, but as night comes on, and especially towards midnight, he is struck with total blindness, even though a bright moon be shining.

CAUSES.—Hereditary disposition, catching cold on damp ground, particularly at night; sexual excesses, affections of the brain.

TREATMENT.—First of all, removal of the cause, and strengthening treatment, one or two stimulating full-packs and steam-baths in bed every week, nightly stimulating calf-packs and abdominal compress which must remain on till morning. When they are taken off, lukewarm (67° to 72°) wet rubbing of the whole body, and open bowels daily, see "ENEMATA."

During the day sponging and dabbing the eyes, using lukewarm (77°) water, cool (58° to 66°) bathing round the eyes; without coming too near them, dry well, and avoid draught. Moreover, cooling and mildly stimulating compresses applied to the eyes, as the feelings of the patient suggest.

EYE, DISEASES OF THE. Short-Sightedness (Myopy) and Long-Sightedness (Hypermetropy) are based upon hereditary malformation of single portions of the visual organs, or of injuries caused by over-exertion and bad habits.

Their cure is possible only in rare cases by guarding the eyes as much as possible from exertion. It is in most cases well to have recourse to spectacles or eye-glasses suitable to the eyes in every respect, in order not to aggravate the disorder. The nature of the glasses, especially their strength, must be determined to a nicety by an oculist.

Treatment.—As far as relief is possible, two eye-baths—one in the morning, another in the evening—or, according to the patient's feeling, from three to five of them to be taken, 66° to 72° for long-sighted, 77° to 86° for short-sighted patients. The eyes to be closed for from five to ten minutes after an application. It is also well to strengthen the surrounding parts by frequent washing or bathing with water of 66°. Looking into bright light, the sudden transition from dark to light, over-exertion, etc., to be avoided at all cost. Some improvement will be arrived at by not fatiguing the eyes, but letting them dwell frequently, and for a length of time, on green fields and woods, or, at any rate, an extension of the affection will be prevented.

EYE, DISEASES OF THE. Squinting is a paralysis of the visual muscles, the two eyeballs being directed towards different points.

This affliction occurs principally in one or two forms, squinting inwards or outwards (squinting upwards or downwards occurs very rarely). In the former of the two cases, one or both eyeballs have lost the capacity of turning outward, the eye, therefore, only turns inward. In the second case the reverse happens.

Causes.—Nervous complaints, over-excitement, which, especially in young children, may arise from an injudicious hydropathic treatment; injury, suppuration, whereby the connection between the cerebral and spinal nerves is interrupted. Other causes (principally of squinting inwards) are: Occupations in which close observation is required, because the lines of vision then greatly converge, *e. g.*, young children, looking closely at their little toys (to this may the beginning often be attributed), or reading, writing, etc. The commencement of a child's school years is frequently the period when squinting makes its first appearance; it has been estimated that of children who suffer from this affliction a far greater percentage is to be found among those who study hard than those who have shorter hours of work. Working near a bad light, hereditary long-sightedness (hyper-metropy) may, likewise, cause inward squinting, whilst squinting outwards is mostly the result of weakened muscular action (the muscle in question is unable to turn the eyeball inwards). This condition is frequently the consequence of brain-disease. Short-sightedness (myopy) may also be its cause.

Treatment.—Above all, the eyes should not be fatigued, and the injurious causes of the squinting should be removed, wearing appropriate glasses; for the rest, strengthening treatment. An attempt should also be made to cure the affected eye by a little exercise, such as closing the sound eye, and looking, or forcing oneself to look, with the affected eye in the direction, in which the paralyzed muscle lies. In aggravated cases,

an operation, *e. g.*, cutting of the shortened muscle by a skilful oculist to remove the distortion engendered by squinting, is necessary. The sight, it is true, is not improved by this treatment.

EYE, DISEASES OF THE. Sympathetic Eye Disease. An affection of the eye, caused by an injury, is liable to attack the other eye as well, and is then called sympathetic affection of the eye. By reason of the constant irritation, which the affected or destroyed eye exerts upon the sound one and its nerve, the same affection may easily attack it. The sound eye is never out of danger, as long as there is sensation of pain in the affected or blind eye.

TREATMENT.—Invigorating, combined with detergent treatment, care being taken to guard the eyes from all irritation. If, in spite of this, danger to the other eye cannot be averted, an operation may be necessary.

TREATMENT FOR AFFECTION OF THE EYES IN GENERAL.—By a non-stimulating diet and proper attention to the action of the skin (daily rubbing with wet towel), the production of good blood, and a regulated process of assimilation is to be aimed at. Strengthening, therefore, combined with detergent treatment to be observed.

Also a regenerative, preliminary treatment is of advantage.

Eye-baths for the various affections of the eyes (as indicated under "SHORT-SIGHTEDNESS"), lukewarm or cool washing of the visual regions, massage and cool bathing of the occiput, to strengthen the nerves of sight, are to be applied besides.

Avoidance of overtaxing the eye, also frequent exercise in the open air, especially in fields and forests, is advisable.

Many eye diseases are caused by other deep-seated maladies, with the cure of which they also are removed.

Massage of the eye consists in stroking and pressing. Press the swollen eyelids with two fingers in an outward direction, at first gently, according to the patient's condition, gradually more vigorously. See "EYE-MASSAGE."

This method is particularly to be applied in cases of stye in the eye, etc. See also "EYE-MASSAGE."

Inflammation of the eyes, occurring usually after an operation and doing often great mischief, must, if at all feasible, be alleviated and rendered harmless by a detergent treatment and by applying under certain conditions cooling compresses, bathing round and on the eyes.

Herr Sanitätsrat Dr. *Niemeyer* says with regard to nervous blindness and deafness: "Do not touch or allow your eye (or ear) to be touched and maltreated by paintings, corrosives, installations, and the like, when you surely must have noticed yourself that the nerves only become more

irritated after the use of the ophthalmoscope, blowing of air into the ear from within and the like. The "nervous" character of the affections consists in the optic nerve and its extension, the retina (or the auditory nerve and its sound-receiving branches), being in a state of desiccation, and surrounded by impure humors. To perform their functions properly, being, as they are, extremely delicate, fine nerve-filaments, they require an environment of pure water to such an extent, as to justify us in saying that they are composed of almost nothing but water. Now, as these structures have for years suffered from desiccation, in consequence of the patient's mode of life, or his shunning pure air and water, and habitually indulging in coffee or beer, entire recovery of health certainly becomes doubtful; still a treatment, calculated to bring about a general purification of the humors of the body (see "STRENGTHENING TREATMENT"), may, in the first place, arrest the disease and, then, gradually diminish it.

Eye, Chronic Diseases of. See "EYE, DISEASES OF," also "BAD HEALTH."

EYE, FOREIGN BODIES IN THE. Foreign substances are found either between the eyeball and the eyelid, or on the cornea, or in the interior of the eyeball. Relief can soon be obtained, if these foreign substances are only small grains of sand, particles of dust, coal, and the like, or gnats, or other little insects, which are usually embedded between the upper eyelid and eyeball, and cause such irritation, as to make it often impossible for the sufferer to open the inflamed and painful eye. To find out the seat of such substances, cause the affected person to sit on a chair near a window, with his face to the light, and the head bent back as much as possible, stand behind him, and draw the upper eyelid back, away from the eyeball. When the cause is discovered, passing gently over with the point of a handkerchief, or with a paint-brush, or the like, is generally sufficient to remove the substance. (Inserting a so-called crabs-eye under the upper-lid, in order to remove the substance, is not advisable and quite unnecessary.) Should the pain continue after the removal of the substance, with a sensation of its still being there, soothing and cooling compresses must be put on the eye.

Insignificant particles are also often removed by merely moistening the thumb or middle finger, and passing several times, not too lightly, over the upper and lower surface of the eyelids in the direction of the nose, and not the other way, beginning at the other extreme corner of the eye; should the foreign substance not come out, we must, then, proceed as follows: If the foreign substance is situated under the upper eyelid, take hold of the eyelid by the eye-lashes, bend it back with a thin pencil, and re-

move the foreign substance by careful dabbing with damp rag or sponge. The lower lid must be drawn downwards and bent back in like manner.

More dangerous are foreign bodies which penetrate to the cornea, such as splinters of metals and other pointed and angular, small substances. Also those entering the interior of the eyeball, as splinters of metal or wood, and such like. They generally produce very violent inflammation, and must be extracted as speedily as possible, with caution, by a doctor or some other person. Splinters of metal or wood, which have not penetrated far, may be removed by means of a powerful magnet. To allay the inflammation, cooling and soothing compresses are applied to the eye. If the inflammation is considerable, a derivative treatment, in addition to soothing compresses, is necessary. Workers in metals, quarry-men, etc., who are mainly exposed to this danger, should, during their work, wear large protecting spectacles, made of window glass.

EYES, INFLAMMATION OF THE. (Ophthalmia.) Inflammation of the eyes may be of different kinds, *e. g.*, inflammation of the eyelids, of the vascular membranes, the iris, conjunctiva, cornea, lacrymal glands, lacrymal sac, etc.

Symptoms.—Redness, swelling, agglutination of the eyelids in the morning, pressure and burning pains, secretion of tears, great sensitiveness to bright light, red eyeballs, etc. This affection is often most painful, but frequently almost painless. Slight, acute forms have the best chance of being easily removed, but chronic forms are difficult of cure.

Causes.—Taking cold, over-exertion, catarrh, infection, also various diseases, as scarlatina, measles, small pox, syphilis, etc., or a blow, pressure, friction, wounding, etc. Likewise, foreign substances, such as dust, sand, poisonous, acrid matter, small insects, etc.

The inflammation of eyes in new-born children, which generally sets in on the third day after birth, and which may, through bad and careless nursing, sometimes result in the loss of both eyes, is caused by the midwife not cleansing the eyes thoroughly with clean water and a clean linen rag when the child has its first bath. The greatest care is absolutely necessary, as the mucous secretions of the uterus tend to infection at that time. The midwife generally uses the water of the first bath for cleansing the eyes, a proceeding sometimes fraught with direct mischief for the child. It must be insisted upon, that the midwife should clean the child's eyes with clean water and a clean rag, and both must, in fact, be held in readiness for her. We must remember that many cases of new-born children becoming blind arise from inflammation of the eyes, and this is caused by the above reprehensible practice, and through careless or med-

ical treatment sometimes results in the total loss of both eyes. See also "OPHTHALMIA."

TREATMENT.—The most scrupulous, greatest cleanliness must be observed with new-born children, and the eyes repeatedly cleansed with (77°) water, a pad of soft linen and wetted in (72° to 77°) water, several times folded, kept on till warm, and then renewed. Also stimulating abdominal bandage of thin, soft linen. Derivative enemata are also advisable. For elderly persons foot steam-bath (see *ibid.*) for from fifteen to twenty minutes, succeeded by tepid (72°) friction of legs and feet.

At night (72°) foot, leg, and calf-pack, and in some cases stimulating abdominal compress for half the night. For the rest gentle, local dabbing, and dissolving the pus with a moist, soft rag dipped in tepid water, as often as required. The eyes should be carefully and gently syringed with a little ball syringe to remove the pus, and tepid (72° to 77°) soothing pads be put or tied on, and changed every ten or fifteen minutes, and combined, if practicable, with stimulating neck-pack applications. Gentle, stimulating compresses on the eyes (water 77°) may be applied for a change now and then. Moreover, vigorous, cool, wet rubbing of the feet, if these are warm, as well as a wet rubbing of the whole body daily. In serious cases a stimulating full-pack or three-quarter pack, or a steam-bath in bed should be given now and then, to promote an even warmth and secretion. Instead of this, a foot steam-bath in bed (see *ibid.*) may be applied, in which case the tepid pads on the eye, or eyes, must be continued, as also with steam-baths in bed. If there is fever, a tepid (90°) bath. The diet must be non-stimulating, and the eye must not be exposed to fatigue, dust, bright light, etc. The green of nature and mountain air are most beneficial. See also "STYE IN THE EYE."

The massage treatment in these cases is as follows:—Stroke the region of the throat, neck, and shoulders with the fingers of both hands several times, after which stroke the region of the temples with downward movement. The treatment should be continued for about a quarter of an hour, and be repeated three or four times a day. (For Modes of Application see Index.)

In cases of eye diseases I recommend Dr. *Katz's* book, "HOW TO KEEP OUR EYE-SIGHT: THE DISEASES AND DEFECTS OF THE EYE," with twenty-nine illustrations; third edition (published by *Grieben*, Leipzig; price, fifty cents). We may here mention that in affections of the eye, more particularly nervous affections, a regenerative treatment is most beneficial, as it is usually in conjunction with some constitutional ailment, *e. g.*, disease of the kidney, or diabetes, though the same may be latent.

For the rest, see article on the disease in question.

Eyelid, Inflamed, see "STYE."

Eye, Massage of. See Index.

Eye, Paralysis of Muscle of. See "SQUINTING."

EYES, SPARKS BEFORE THE. A sudden display of sparks, etc., sometimes points to a serious, irritable condition of the eye, *e. g.*, cerebral irritation and congestions in hard drinkers, hypochondriacs, etc., which may even result in total blindness; frequently, however, these symptoms are of a less serious nature.

TREATMENT.—Abdominal pack at night, frequent half-baths, three-quarter steam-baths, or steam-baths in bed, followed by (88°) bath. For the rest, invigorating treatment and removal of original disease.

EYES, SPOTS BEFORE THE. This is less dangerous, and consists of seeing little dark specks and beat-like forms flitting rapidly across the range of vision; nearly all short-sighted persons are affected with it.

TREATMENT.—Non-stimulating food and drink, particularly avoiding salt, vinegar, and the like. The bowels to be opened regularly by means of enemata; exercise, fresh air, and attention to cutaneous action. It is also necessary to spare the eyes as much as possible.

Flickering before the eyes often occurs suddenly, when the eyes have been overstrained, but also after drinking strong, stimulating beverages, which cause an increased flow of blood to the eyes. It can be stopped in a short time by giving the eyes rest, and by a detergent treatment (detergent enemata, extension, motions, etc.). See "CURATIVE GYMNASTICS."

REPORT OF CURE OF EYE-AFFECTION.

Case treated in the BILZ Sanatorium at Radebeul, near Dresden.

Miss *M. H.*, of Breslau, aged twenty, had suffered from her ninth year from chronic inflammation of the eyes, with swollen and very red eyelids and upper lip, in consequence of scrofulous degeneration of the blood. She had undergone various medical "cures," injections, paintings, applications of corrosives, but without result, as is the case with every medical treatment of a disease, which has its root in a faulty condition of the blood. Our treatment, however, was not only directed to the inflamed parts, but aimed at the removal of the inflammation as well as at preventing the eyes from becoming again liable to affection. Inflammation extinguished and suppressed by medicine is apt to re-appear, since its causes and products have remained in the system and not been eliminated.

The patient underwent a two-months' treatment in our Sanatorium, during which time were applied, head vapor-baths, also alternately foot vapor-baths, eye-baths, massage (especially of the neck), and treading

water. These applications were combined with a general dietetic, hygienic treatment, such as exercise in the open air and vegetarian diet, and when she had further gone through a vigorous *Schroth*-cure, she had improved to such an extent, as to be considered cured of the inflammation of the eyes.

NARRATIVES FROM SUFFERERS OF EYE-DISEASE.

I had tolerably good eyes when a child, but became near-sighted later on, owing—I think—to my insatiable love of reading till late into the night, or by moon-light, in winter often by a bit of candle. This complaint became worse and worse, and as a law student I was already notorious among my friends and acquaintances for my short sight. In the third or fourth year of my studies another complaint suddenly made its appearance, without any warning whatever. There was a flickering before my eyes; the outlines of objects became indistinct, as in a mist; the letters seemed to dance on the paper before me. I could read neither by day nor by artificial light, neither print nor written matter. The several weeks, passed in this condition, I used to call the most dissipated ones in my whole life; for not being able either to read a book or to write my exercises, I had no resource, except when I attended the lectures at the college, but to idle about, pay visits, join merry company in the evenings, and, especially, play cards, in which amusement plenty of sympathetic colleagues joined me in the morning, afternoon, and evening. I had, of course, called in a physician, at the very outset of the complaint, or rather physicians, because after the failure of the *laudanum liquidum*—that, I think, was the name of the fluid, which the allopathic physician prescribed to produce any effect—I consulted a homœopathic authority, who treated me to goodness knows what globules from his pocket-dispensary. But they were just as unavailing as the other, and, though I was of a very sanguine temperament, I gradually began to feel rather uncomfortable when drawing in my imagination the dismal picture of not being able to read or write anymore. It was my aunt who, at last, extricated me from my unenviable position. She was the daughter of *Joseph Rottenberger*, doctor and professor of medicine at Prague, who lectured not only on anatomy and physiology, but also on the treatment of eye diseases. But it was not from him, who, moreover, had been dead for many years, that she obtained the remedy, which he, as the "celeberrimus" of the oldest university of the empire, would have scouted as unscientific; for the remedy, which my aunt persuaded me to use, was nothing more or less than pure water, fresh from the pump. "You may apply it without any scruples," she said to me, "it has completely restored sight to a poor seamstress who lives by the use of her eyes, and who was attacked by a similar

complaint." In consequence of this assurance I put full confidence in my aunt's remedy, while pretending only to go on with the prescribed drops. Within a few days I was able to distinguish large writing at intervals, soon after I could read print, and in a fortnight, or three weeks, I had quite resumed my old life. Acting on my healer's advice, I continued this remedy for a long time, though not so frequently as formerly, until I limited it finally to bathing my eyes in the morning. The cure, in fact, was effected by eye baths. I bathed first one and then the other eye, repeating this process four or five times daily. After having regained the full use of my eyes, I applied the remedy only three times a day, later only morning and evening, and finally, as no relapse took place in the course of years, only in the morning. The result of this treatment, surely the most simple possible, was a lasting one. When my late father, who had never known what it was to have bad eyes, happened to see me bathing my eyes, after I had already recovered the use of them, he would say: "If you are obliged to have recourse to such artificial means in your young years, what will you do when you are old?" And I had to own that a complaint, which had attacked me when a young man of nineteen or twenty, caused me some misgivings that it might return, and return frequently, in later years.

Fortunately, however, nothing of the kind has happened to this day (I am now sixty years of age), except a passing flicker, causing the letters before me to be confused for a few minutes, a quarter of an hour at the most, and even that occurs very rarely, and at intervals of years; a reminder, as it were, of times long past, when I was in a critical and dangerous position; my eyes have even become stronger than they were formerly in many respects; not keener of sight, but stronger. For in my younger years when I was still a professor at Krakau, and even here in Vienna, I used a green shade when reading in the evening, which I have discarded for the last ten years.

Only quite lately, while writing this account, I have had a few gentle reminders of the distressing weeks I passed during the time of my studies. Heaven grant they may remain only reminders, for it would be terrible for me to be obliged to give up reading and writing.

The natural remedy, water, has, at any rate, retained its healing power in me during a period of nearly forty-five years, a thing which no allopathic medicine, no homœopathic globules were able to do. Such a fact is surely worth recording.

Baron *Joseph v. Helfert,*
Member of the Senate in Vienna.

CURE OF GREATLY IMPAIRED EYE-SIGHT.

By v. Seth, Bremen.

I was consulted some time ago by a high official whose eye-sight had decreased to such a degree, that he could not read large type, and could not recognize, even in close proximity, people whom he knew, nor had he been able to transact any business for some time past. He told me that he had drunk the waters, prescribed for him in the most various places, with the result that his eye-sight had become steadily worse; nor had oculists been able to arrest the disease. The physicians had unanimously diagnosed his complaint as nicotine poisoning, caused by constantly smoking strong Havanna cigars. The oculists, who treated him last, had given him a certificate to the effect that he was incurable, and the government, in consequence, took the necessary steps for his discharge. It was during this time that he came to me to have my opinion on his case. I told him frankly, that I had not yet cured an affection of that kind, but could only advise him to give my treatment a trial, which, at the worst, could do him no harm. Perhaps, and very probably, it would be possible so to strengthen the system by a rational diet and by taking proper measures, as to enable it to eliminate the poison.

My representations seemed to influence him, and so the treatment was commenced. The patient had, in the first place, two gentle, wet rubbings a day. The diet consisted of malt coffee and dry bread for early breakfast; fruit, bread, and water for lunch; a little meat, mashed potatoes, stewed fruit, and bread for mid-day dinner; in the afternoon the same as in the morning, and in the evening the same as for lunch. After a week I prescribed, daily half-pack (72°) of three hours' duration, followed by wet rubbing; after another week two full hip-baths (86°) of twenty minutes' duration daily, and massage of the abdomen; and finally vigorous, wet rubbing, the half-packs being meanwhile dispensed with. After a month's treatment considerable improvement was visible; after four months the gentleman could again follow his calling, and the threatened retirement was happily averted. I regret that certain considerations do not permit me to publish the gentleman's name, who was thus cured by the Natural Method, but a former patient of mine, Mr. *Fritz Drewes*, owner of the well-known "Café Bismarck" at Bremerhaven and a friend of the gentleman in question, and whose case will appear in one of the following articles, will vouch for the truth of the above account.

CURE OF SEVERE INFLAMMATION OF THE EYES.

By the Natural Healer Mr. Canitz.

On July 31st, Mrs. *Manske*, Gneisenau-Strasse 106, Berlin, brought her little daughter, three years old, to my consulting room for my advice

and help. Both eyes of the little patient were swollen to an enormous extent. At the attempt to raise the inflamed, enlarged, and firmly closed eyelids, a little thick pus issued forth.

The child suffered from acute pains in the eyes. The nose was highly inflamed and swollen; the skin on the side of the right cheek was entirely destroyed, discharging liquid matter; hands and feet were swollen, as if with dropsy; there was great tension of the skin all over the child; the body hot; pulse feverish, hundred and thirty beats to the minute. My presumption, that the child passed but little water, was confirmed by the mother. She further told me that the child's eyes had become red six weeks before. She had gone at once to a well-known ophthalmic hospital, where the child had been taken every day for five weeks to be treated by a specialist with painting, douching, insufflations, salves, unguents, etc. After five weeks' treatment, during which the eyes became worse and worse, the specialist had declared that he could not do anything more for the child, as some deep-seated disease was the cause, and some physician for internal diseases should be consulted. This was done. An "internal" physician had paid three visits, but, as prescriptions and direction only resulted in an aggravation of the child's condition, he arrived at the conclusion, "The child must die, there is no help for it," and with this consoling prognosis he discontinued his visits. The parents' attention had been drawn by the employer of the child's father to the Natural Method of treating diseases, and the mother, consequently, brought her little church-yard recruit to me. I was convinced that there were here two totally different diseases, arrested and disturbed, in their normal course, one by the eye specialist, the other by the "internal" physician. The disease last disturbed was undoubtedly scarlatina, which had been precipitated on the kidneys, producing inflammation there, preventing the proper secretion of urine, and causing the dropsical features of the case. The inflammation of the eyes was of older standing, and its origin was decidedly scrofula, which, by a local treatment, had assumed so malignant a character.

The great point, therefore, was to approach the system with gentleness, having due regard to its already half-exhausted and greatly reduced vital force and, at the same time, energy, since there was not much time to lose, or in which to make experiments. In order to give tone in some degree to the sadly neglected skin, baths were given in the first instance. Half-baths (88°) from five to seven minutes, with rubbing and sponging of the upper part of the body with the bath-water. Gentle stimulation of the superficial blood-vessels and nerves was decidedly the proper course to pursue here, in order to relieve and strengthen the central nerves, and promote circulation of the blood. To relieve the inner organs from congested matter (apparently only possible of attainment by increasing the

activity of the skin to its utmost, so as to produce abundant perspiration), steam-baths in bed, combined with (72°) trunk packs, were applied. This treatment was followed by the half-baths already mentioned. Trunk and leg-packs at night were, likewise, of importance. The eyes, extremely painful at the slightest touch, were gently and very cautiously syringed with a small ball syringe, and the discharges carefully removed. Mouth and nose were, in the same way, frequently cleansed with the syringe and water at 72° and 82° respectively. The diet consisted entirely of thickly boiled farinaceous food and of milk. The system responded to these measures most satisfactorily and activity of the skin soon set in. A scarlet rash appeared as early as the third day. The whole body, from head to foot, looked like a lobster. The kidneys became more and more relieved, the secretion of urine more and more considerable, and bearing in mind the circumstances, the whole course was a hopeful one, though the general condition of the patient could not but cause anxiety. After a week her general health had improved, her eyes were less swollen, her nose, mouth and cheeks healed up, happy confidence had taken the place of care and anxiety, and after a fortnight's treatment her eyes were peeping tolerably bright and clear through their eyelids, now almost free from inflammation, and she looked with joyful admiration at a colored print which I had promised her, if she were very good. The result abundantly rewarded the mother's trouble and labor, expended with truly touching devotion. I was convinced that with patient dietetic nursing complete and steady recovery would take place.

This was the condition on Saturday, August 16th.

On the following Monday Mrs. *M.* comes to me in the morning, informing me that the eruption had again broken out all over the child's body, and that the child was very ill. When I went to my little patient, I found her again in a high fever, her body, including the head, covered with pustules, similar, but only similar, to smallpox, and the eyes inflamed as before. What could this be? The phenomenon had no connection with scarlatina; that would have run its regular course. Had some insidious enemy, perhaps, long latent in the system, come forth from its hiding place and become visible? Hardly anything else could be supposed, for it was impossible to ascribe it to outward causes, neglect in nursing, or faults of diet. The cause must be sought for in the system itself. Its further course would speedily remove all doubts. The pustules, looking so much like smallpox, soon developed into real syphilitic ulcers. Hundreds of them covered the entire body, some being so large and deep that they could easily have held a hazelnut. There was a cavity between the fore and middle fingers of the left hand

extending down to the bone and exposing it; the head was thickly covered with ulcers and the hair had to be cut off to the very roots. The sexual organs were quite destroyed and eaten away; nose, mouth and jaws fearfully affected. The little creature was a most pitiful sight! Day and night moaning and groaning with pain; for five consecutive days incapable of passing even a mouthful of water across her lips, every drop of urine causing the most excruciating torments; it was enough to move a stone to pity. There were, in addition, in the beginning of the second week, attacks of diarrhœa, mixed with blood and matter which greatly weakened the child. Here my object was to soothe, to compose, to support and at the same time to husband the little strength left, besides encouraging the mother, who had become more and more despondent.

But the vital force, led and aided by the Natural Method, gained the victory at last. The child was saved and enjoys to-day most excellent health.

The road to this victory was certainly a rugged one. Courage and perseverance were required on the part of the nurse. To be day and night at her post, not merely to administer every two hours some little powder or pill, some little medicine or mixture, but, early and late, at all hours to provide half-baths, so syringe the eyes, the mouth, nose and the large ulcers, to apply trunk and leg-packs, steam-baths in bed; continually to put cotton wool on the sores, in short, trouble and work, such as was required and exacted by the plan of cure.

But, how came the child to be afflicted with such a terrible disease? Her parents had never been afflicted with it, and so could not have been the cause of this morbid poison lying dormant in the child. It had been well enough up to the time when it was vaccinated. From that moment it had become sickly, had been taken to several hospitals in Berlin and had been treated at them, but without any resulting benefit. The mischief confined in the system then broke out. First, inflammation of the eyes, as I assume, of a scrofulous nature; after a six weeks' struggle against it, scarlatina, and, when this was cured, syphilis, which left no other explanation for its existence but vaccination.

If the system had not wisely economized its strength, had called forth its healing crises one after the other; if the eruption of scarlatina had coincided with that of syphilis, recovery could hardly have been expected, no hope of cure could have been entertained, and the prediction of the physicians who could only observe the inflammation of the eyes and the conditions of the fever, would have turned out true. As it was, however, the system succeeded in conquering the diseases, giving proof of its capacity to make possible the apparently impossible, when supported in a natural manner.

GRAY AND BLACK CATARACT.

By Lieutenant-Colonel Spohr.

Another interesting cure of an obstinate affection of the eyes quite recently proves in no small degree the beneficial effect of the natural method of treating diseases.

I was consulted on the 22nd of April, of this year, by a near relative of mine, for an affection of the eye, with which his friend, the chemist Mr. *H.* in C., was afflicted, and which caused his eyesight to be considerably impaired. The affection showed itself first by a trifling pain in the upper eyelid, in the beginning only of the left eye, later also of the right.

The painful sensation consisted at the outset only of a pressure exercised by the eyelid on the eyeball, followed speedily by acute shooting pains, increasing in intensity from day to day. The power of sight decreased with the increase of pain, and it seemed to the sufferer as though a fine linen curtain were drawn before the transparent cornea, through which he had a glimmering indistinct view of every thing. The remarkable thing in this was that he could see considerably more distinctly every time that the smarts and shooting pain increased—a clear indication to my mind that these pains expressed the reaction of the organs against the foreign matters impeding their functions.

Light and bright colors were intolerable to the eyes and caused acute pain.

H. consulted two oculists and a third physician (not a specialist). The specialist first consulted declared the affection to be an induration of the cornea and recommended the application of cupr. sulphur., 0,3:10,0 four drops of which were to be instilled daily, and, if this should be of no avail, an operation, *viz.*, the cutting away of the induration. The second specialist thought he discovered a kind of wart-formation on the cornea, which must most decidedly be removed. The patient was for the present to apply three drops daily of a nitrate of silver solution, 0,4:10,0, and wear light-blue spectacles as a protection against light. Neither of the two gentlemen expressed any opinion as to the cause of the affection. The patient now consulted the third physician, who inspected the eye without ophthalmoscope and could not discover anything of the wart-formation, but declared the affection to be a convulsive condition, engendered by over-exertion, and more developed in the left eye than in the right. He, too, recommended the use of the blue spectacles and the application of atropin sulphur, 0,05:10,0, in the eye, also frequent warm footbaths with mustard powder, to prevent too much blood going to the head.

The patient did not follow any of these prescriptions, but, as already mentioned, consulted me through the medium of a relative. To get at the first cause of the affection, I learned, on closer inquiry, that it had originally made its appearance after several weeks' severe study, protracted into the night, during which his eyes and lungs had frequently come in contact with laughing gas and muriate of ammonia. After this I could not but agree with the diagnosis of the two specialists—as far as it went—knowing from experience that ammonia is particularly apt to bring about an inflamed condition of the transparent cornea, resulting in exudations and indurations. My advice was to refrain from all study, reading, etc.; to observe a mild, non-stimulating diet and avoiding all spirituous liquors, salted food viands, strong coffee, etc., to bathe the eyes with cold water morning and night (of the temperature usual for washing the face); to bathe the head and neck with lukewarm water, but to use water of the former temperature for washing the breast and lower parts; to massage the eyes by seizing the eyelids and applying a rotary motion to them, also to massage vigorously and with greater pressure the parts above the eyebrows from the root of the nose in the direction of the temples. He was, besides, to apply a douche-bath by means of a strong syringe with cold water to the forehead above the eyebrows, and, after that, to inject with a very delicate little syringe a light jet of lukewarm water (82°) into the eyeball; lastly, as far as his profession permitted, to take daily one or several cool derivative foot-baths of about five minutes' duration. All these orders were strictly observed and effected from the very commencement an ever-increasing improvement, though not unaccompanied by some remarkable phenomena. The first traces of progress were perceptible in a diminished pressure on the eyelid; at the same time the left eye, which was the more affected of the two, could bear the light better. But the visual strength of this eye decreased from day to day, whilst the shooting pains increased and even spread over the temple in the direction of the forehead. The eye began to water, too, a great deal, which had not been the case before. When the pain was at its highest, a fine, minute little particle of skin peeled off one day from the cornea, a yellowish white fluid escaping from the eye at the same time. From that moment the pain was gone, the eye remained for a few more days sensitive to the light, but its strength increased steadily. The cure of the right, apparently less affected eye, took much the same course. A fortnight later a little piece of skin also came off, but without the secretion of any purulent liquid. Seven weeks after the first symptoms of the affection and five weeks after the beginning of this cure, both eyes were on the road to perfect recovery,

and, when I saw the patient in the middle of July in the same year, his eyes were as fresh and sound as ever. I wonder whether this would have been the case if the prescribed corrosives or atropin had been applied, or even if an operation had been performed! This question can scarcely be answered in the affirmative.

CURE OF A SO-CALLED EGYPTIAN INFLAMMATION OF THE EYES.

After having suffered for eleven weeks from Egyptian inflammation of the eyes and finding no relief at the University Infirmary of Greifswald (on the contrary, my condition became worse every day, so that I was nearly blind), I was cured of my dangerous complaint in four weeks by Dr. *Koerner,* who adopted the *Schroth* treatment (Regenerative treatment). *J. Haecker,* merchant.

Dr. *Koerner* describes in his work (p. 43) most explicitly how he has cured many patients, some of them suffering from long-standing scrofulous, rheumatic and Egyptian inflammation in a comparatively short time. His principal treatment consisted in a detergent course, abdominal pack at nights, very strict non-stimulating diet, attention to the action of the skin, never fatiguing the eyes, etc.

GRAY CATARACT,

not operated upon but cured by the Natural Method (communicated by A. Ahrens.)

My daughter *Anna,* aged twenty, had gray cataract in her left eye, and the physician declared that nothing but an operation could save it. Being opposed to such an operation, I applied to Mr. *Gedrath,* who had already cured my children on a previous occasion of scarlatina by the Natural Method. When he had examined the eye, he found that that was not the only organ affected, but that the whole system was out of order and he said he would, therefore, apply a constitutional treatment which would decide whether the cataract would not, by inflammation, perform its own operation. After a fortnight's treatment with baths, wet rubbings, massage, and diet, a most violent inflammation of the eye set in, recurring over and over again. After a short time she could recognize the face of a watch, and, after every fresh inflammation, came increased clearness of sight, and when several repetitions of it had taken place, she was able to read easily and perform all her duties.

Feeling impelled once more to express my recognition to Mr. *Gedrath* for his gratuitous help, I cannot refrain from drawing every sufferer's attention to the Natural Method of treating diseases: facts like my daughter's recovery are the best testimony to the value of this treatment.

A HUMAN EYE PRESERVED.

by Herr von Seth, Natural Healer, Bremen.

Mrs. *Kaltan*, of Heiligenfeld-Syke, near Bremen, came one morning with her little boy, aged one year, to consult me. Six weeks before, the child had had the misfortune to injure his left eyeball with a piece of glass. The mother had at once gone with the child to a specialist of this town, who, after a treatment of six weeks, told her the eye had become blind. A second specialist gave the same opinion, but added a recommendation to wait a few days to see whether, if it should come to the worst, the preservation of the right eye, which had already become inflamed, could not be effected by taking out the left one. At his next visit the doctor thought the removal of the left eye was necessary, and wrote out a certificate for the purpose of enabling the child to be admitted to the infirmary here. Instead of going there and having the eye taken out, the mother came to me with the child. By a general derivative soothing treatment I succeeded not only in preserving the one eye, but in restoring perfect sight to both of them in six weeks.

WEAKNESS OF THE EYES, COMBINED WITH OTHER DISEASES, CURED.

Mr. *L.*, manager of a stocking factory at Grossolbersdorf, near Zschopau, had had trouble with his eyes for years. A tantalizing weakness of the eyes was gradually associated with shortsightedness, which had existed for some years. Specialists in two large towns could procure him no relief. In consequence of grief at the death of his only child, there was added to it last year a severe gastric complaint: nutrition failed almost entirely; aggravated nervousness supervened and the man became thoroughly melancholy. Moreover, his short-sightedness and weakness of the eyes became so bad that he was obliged to shut up his business. A well-known oculist told him, after examining him, that he must not reckon on an improvement in his condition! In this sad state he sought relief in the Natural Method of Healing. He introduced himself to me at the beginning of this year, and, after a thorough examination, I could assure him that his case, though serious, was nevertheless capable of improvement. Besides a strictly regulated and properly adapted diet I prescribed energetic breathing gymnastics (lung-gymnastics) (the man had been a regular "stick-in-doors" and did not understand how to breathe) and proper attention to the skin, consisting of mild applications of water (foot steam-baths, washings, half-baths) and air- (lung) and sun-baths. He followed readily all my injunctions and has for some months again superintended his business. His short-sightedness has not

gone, it is true, but, on the other hand, the weakness of the eyes has left him almost entirely: the gastric and nervous complaints are removed and his frame of mind is normal.

CHRONIC DISEASE OF THE EYES COMBINED WITH ALMOST TOTAL BLINDNESS.

by Professor Trall.

M. Burrel, of Lanasca, Pa., aged 16, suffered from chronic inflammation of the eyes and was treated medicinally till he had become almost completely blind. For months past he had already been unable to distinguish objects, and when his mother brought him to my Sanatorium, he could hardly tell the difference between night and day. His skin was extremely inactive, his feet were always cold, the head hot and his eyes so sensitive to air and light that he constantly kept them covered with a bandage. His bowels also were very sluggish. A month's treatment put them right, gave the proper balance to the circulation of the blood and enabled him to distinguish small objects and expose the eyes to air without pain. After he had been treated for three or four months, according to the Natural Method of Healing, his eyes were entirely cured and his general health left nothing to desire.

CURE OF A SEVERE EYE AFFECTION.

by the Natural Method.

As editor of the periodical for popular hygiene I received one day a letter from one of the most renowned ophthalmic hospitals of Germany, the writer of which had evidently performed his task without the use of his eyes. The contents confirmed my opinion. I was asked in it whether eyes in a violent state of inflammation, improving neither after continual instillations of atropin, nor after weekly bleeding, but becoming continually worse and worse and which were to be operated upon in a few days, had any chance of cure by the help of the Natural Method of Healing. I was convinced that the worst symptoms were to be ascribed pre-eminently to the above-mentioned treatment and advised him to put himself in the hands of an efficient Natural Healer. With this I thought I had done my duty and had shown the patient the way he should go. A few days afterwards there came at mid-day a gentleman with both his eyes closely and thickly bandaged and led by a lady, who introduced him as the patient from the noted ophthalmic hospital who wished to consult me. On seeing his eyes and the patient's general condition I was aghast at the sad spectacle presented to me, the yellowish earthy looking emaciated face of this young man fully testified to the disastrous

havoc which calomel in conjunction with bleeding had wrought in his system, whilst the violent inflammation of his eyes proved clearly enough that neither calomel nor sulphuretted atropin nor bleeding had had any beneficial effect whatever on his eyes. If now an operation promised to be as futile and unprofitable as the five weeks' treatment which he had undergone, was it to be wondered at that he took refuge in flight from his would-be butchers? The sad experience the poor injured man had gone through during that time was enough to make him doubt the beauty or perfection of medical science and had led him into the arms of the Natural Method of Healing, a method at once despised and vilified by medical men protected, as they are, by the state, in their practice of killing and curing. How those doubts became possible will be best explained by the gentleman's own description. With restored eyesight he has now written the narrative of his sufferings and recovery, to be circulated in my periodical:

"About two years ago I felt a continual lassitude and constant decrease of my strength, without being able to ascribe it to anything more than to fatiguing mental work which had preceded it. The opinion of an allopathic physician, whom I consulted as to my condition, was that I was suffering from engorgement of the liver, whilst a homœopathist expressed himself to the effect that the cause of my complaint was impurity of blood. I gave greater credence to the latter view, and I made up my mind to undergo the proposed "blood-cleansing radical cure." After a month's uninterrupted trial of this "sweat cure," I had an eruption of the skin, which was considered by the doctor who treated me as a good sign. The only thing that was and remained a puzzle to me was that in this treatment my constipation remained obstinate and that, notwithstanding the different medicines which I took, I could not keep my bowels open. The constipation, on the contrary, only became more obstinate and I contracted a tendency of blood to the head, resulting speedily in inflammation of one eye. As this appeared to assume a serious character, I applied to an eye specialist, who prescribed a bottle of medicine and a small bottle of lotion for the eye. Still he did not cure my complaint; on the contrary, it entered another stage. The inflammation was communicated to the other eye, and the specialist then prescribed infusions into the blood-vessels of the temples. Losing, however, all confidence in the doctor, and my eyesight becoming rapidly so bad that in the end I could not recognize people I well knew at the distance of a yard, and only just caught their outlines when they moved, my anxiety and uneasiness became greater every day and I, therefore, applied for help to one of the most frequented and renowned ophthalmic hospitals of

Germany. On my journey thither I could not find my way, notwithstanding a brilliant gas light and my intimate local knowledge, and the official of the place had to take the money himself out of my purse and pay the fare, because my eyes were incapable of performing any kind of service.

Examined by the Professor of the institution, I had the consolation of hearing from him that, with the enforcement of a strict diet, help was still within reach for me. For five weary weeks I waited for the fulfilment of the assurance. But my hope was a vain one. Although my eyes were painted with sulphate of atropin daily, morning and evening, although on account of the obscuration of the vitreous body I had to endure being cupped to the amount of 250 scruples by means of a glass cylinder and air pressure twice a week, and although I had to rub my upper arm and thighs with thirty scruples of gray ointment (preparation of calomel) the only result was entire absence of appetite, painful loose teeth, and the condition of my eyes, instead of getting better, became constantly aggravated. A bottle of iodine next appeared on the scene to combat the destructive effects of the "ointment cure," and, this having no effect, fresh troops, in the form of these bottles of poison, were in prospect. The futility of my present treatment was to be encountered now by an operation on the eyes. "A last attempt," "painless," "a little puncture with the lancet." "Harmless," indeed! A trial without certain prospect of success: What I had hitherto suffered and gone through caused me to lose all courage and hope of relief from eye-specialists. Add to this that I heard from a number of fellow-sufferers in the institution, that, in spite of an operation, dangerous relapses had occured. In my anguish I asked for advice in different places; all the answers counselled an operation except one. A letter arrived from the Director of the Saxon Central Union for Hygiene, Mr. *Canitz* in Chemnitz, which raised my spirits once more. A happy feeling overcame me when the letter was read to me by one of my companions in suffering, better off than I was; I could sleep but little in the night for joyful excitement, and one of the following days was fixed for my departure to Chemnitz. With the admonition to let no draught whatever get to my eyes, I set out. I had not said one word to the Professor of what took me away so quickly. I knew as good as nothing about the Natural Method and the return to the "celebrated ophthalmic hospital" was still open to me. I arrived safely at Chemnitz; conducted by my wife, I sought Mr. *Canitz*. A searching examination and a lengthy inquiry into all the bodily conditions of former and present times followed, and instructed in every detail and with buoyant spirits I returned to

my home to begin the treatment. Vigorous detergent treatment, stimulation of the prostrate vital force, normal blood production by regulating digestion, aiding the organs of secretion, and rest for the ill-treated eyes. These were the fundamental features on which Mr. *Canitz* based his treatment. Everything appeared very sensible to me, and I, therefore, followed his instructions with painstaking conscientiousness.

The treatment consisted mainly in steam-baths for the feet twice a day, wet rubbing of the whole body (50°), full packs, enemata, mild, non-stimulating vegetarian diet and — avoidance of atropin. If inflammation should set in, it was to be opposed by vigorous rubbing of the lower parts of the leg and feet. What I considered impossible actually took place. The beneficial effects of the treatment made themselves felt, I might almost say, soon after first application.

After a week's treatment, I could, without guide and without bandage, merely with the protection of blue spectacles, undertake the journey to Chemnitz. It is true it seemed at first sometimes as though my eyes were going to be inflamed again; but although at the ophthalmic hospital neither atropin nor cupping had the slightest effect upon the increased inflammation, energetic rubbing of the lower thighs removed at once any tendency to it. In short, my eyes and my health improved from day to day. At the hospital they had warned me against exposing the eyes to the influence of air,—especially if cold. I went, on the advice of Mr. *Canitz*, every day for a walk, even in inclement weather. The entire treatment had nothing but a beneficial effect upon my eyes, and my whole constitution henceforth became stronger and healthier. After a three months' treatment I took up again the most fatiguing literary labor, which occupied me day and night, and have been able to this day to perform it to my complete satisfaction and without the least interruption. When I called once more on the Professor for the purpose of obtaining a certificate, this gentleman expressed his astonishment at my good appearance in these words: "Have you done anything? Your eyes look remarkably well". Another physician present, upon remarking that an operation on my eyes had already been decided on and that the Professor had declared that to be the only possible means of relief, the latter replied: "Well an operation is no longer necessary now, but I am afraid of a relapse and an operation will then be imperative". With this he walked away.

A relapse, however, has, thank God, not taken place, in spite of daily exertion to my eyes, and my eyesight as well as my general health is such that I do not in the least share the Professor's fears. But I guessed thus much from his last expression that, without the assiduous

and conscientious counsel of Mr. *Canitz* I should have been to-day a man who has been operated upon, without a vocation, and who knows what else, and further that I owe my present excellent health, next to the Almighty, to him and to the Natural Method exercised by him with such devoted conviction, and in consequence of his unqualified success I am anxious to recommend him most warmly to all sufferers.

*Theodor Richter.**)

CURE OF SEVERE INFLAMMATION OF THE EYES.

Last Easter I had in my second class a boy named *Oehme* (his father is a merchant of this town, Lerchenstrasse 4), whose eyes were continually so inflamed that he was almost unable to take part in reading and writing. On inquiry I learned that *Oehme* suffered last year from his eyes and that at the very beginning one of the best physicians of the place had been consulted; but as no improvement took place, they had called in an eye-specialist, also without result. The poor boy was by the advice of some friends tormented besides with the *Baunscheidt***) treatment. From all the symptoms (sensitiveness to light, plethora of blood, contraction of the pupil, watering of the eyes, and from the treatment by the doctors, (especially instillation, if I am not mistaken, of belladonna), it was clear to me that the boy was afflicted with the same eye disease, viz: inflammation of the cornea, from which you relieved me successfully on two occasions some years ago.—

I refrained for a long time, however, from advising the patient in any way. It was only when the mother came to me quite downcast and made excuses for her son, not coming to school in future as the inflammation had assumed a very severe character, that I felt impelled to tell the anxious mother simply what had relieved me at the time of a similar affection, leaving it to her entirely to make use of it or not. After the father had spoken to me on the subject, the boy disappeared from school, but to my surprise, after the lapse of about a week or ten days, he was sitting before me with his eyes fresh, clear and bright, and is to this day (a space of about four weeks) in the fortunate condition of being able to perform his tasks with healthy eyes. The Natural Method in this case as in others showed its wonted efficacy.

These are the simple facts. I leave it to you to make use of them for your paper, if you like, and only request you will kindly send me a copy of the number containing the narrative if you accept it.

Chemnitz. *E. Birke,* Sonnenstrasse 10, II.

*) The correspondent's address can be had from the editor of the periodical.

**) The method of making little punctures in hte skin, into which an irritating fluid is then rubbed, to effect stimulation of the parts.

P.S. In accordance with the treatment that had been so successful in my own case, I advised morning and evening full-packs, with wet rubbing (72°), compresses on the eyes (86°), douching the nose (77°), gargling (68° to 72°), repeated every hour, constant neck bandage at night, foot and abdominal packs, cool bathing of the feet followed by rubbing.

HOW DO MOST PEOPLE BECOME BLIND?

From the book: "Natural Method of Healing," by Pastor König.

Some years ago I was in Brandenburg on the Havel. I saw there a strong healthy man in his twentieth year, who being completely blind, was led by a young girl. On the blind man coming near me I asked him under what circumstances he had become afflicted with such a sad misfortune and how it had originated. He replied: "An inflammation of both eyes was the commencement. The doctors at first put blisters behind both ears; later on I had leeches and as all that was of no good, I had corrosives applied to both eyes. From that moment I advanced, under terrible pains, towards total blindness".

This story I once related to a Mrs. *Lange* of Berlin and her sister, married to a lawyer in Küslin, adding that the children in the Berlin institute for the blind had in the same way once had their eye-sight, and had all, after suffering from inflammation of the eyes, been made blind by medical treatment. The above ladies, from holy awe of the gentlemen of the medical faculty, thought this absolutely incredible. I then proposed that they should grant me the pleasure next day, when the public had free access to the institute for the blind, of taking them to it and of verifying then and there what I had just told them. The proposal was accepted. We were received kindly at the institute. All the children were there, and both boys and girls were showing what they had learnt. There was reading, there was an exhibition of writing executed by the children, some had to perform pieces of music, and many things were shown which the blind children had worked with their hands. Everything was beautiful, excellent, nay admirable. I could not, in the presence of the children, well put a question regarding their blindness. So I waited for a favorable moment. It came quite unexpectedly when we took our leave. The director, a handsome refined man, accompanied us, perhaps out of regard for the young ladies, who were young and good looking. When we were some distance from the children, I asked the director: "Were all these children born blind?" "O no", was the answer, "They were all able to see once". "How then did they become blind?" "Inflammation" was the reply, none of these children became blind without first having an inflam-

mation of the eyes. When we had arrived outside, I asked the ladies whether, after the director's statement, they were convinced now, that blindness had always been preceded by inflammation. They said: "Well, we believe it now. How can we help believing it, after having heard it from the proper source". "Well", I replied, "then you cannot doubt any longer, who it was that changed the inflammation into blindness. Blindness, a horrible chronic affliction!"

Children who have been born blind, are very rare indeed. I, who am now 82 years old, have altogether known only two instances:

They were brother and sister, the children of Herr *v. Brand* of Kauchstadt, in the Friedeberg district of the Neumark. Their eyelids were firmly closed and there were very deep cavities as though no eyes existed.

EYE, DISEASES OF THE. REPORTS OF CURES.

Case of disease of the eye cured in the Bilz Sanatorium, Dresden.

No true believer in the Natural Method of Healing will have recourse to the medicine bottle on the appearance of a so-called internal disease; he has learned that it is not medicine that heals, but the healing force inherent in our organism, and that we can also assist this healing process by appropriate application of our natural healing factors, *e. g.* light, air, water, diet, etc. Many of our earnest adherents however lose faith, when a disease of the eye is in question. All the good lessons of the Natural Method of Healing are then forgotten and they rush straight off to the oculist, who in many cases only treats that tiny part of the body called the eye without thinking it necessary to subject the whole abdominal to a proper treatment. With how little success such a course is often crowned and how in reality only a natural treatment can effect a perfect cure, even in eye disease, I will prove by an example for the benefit and instruction of those, who may some day find themselves in a similar predicament.

Miss *R.* of B., seventeen years of age, came to our sanatorium on June 8th, 1897. An examination of the eye disclosed scrofulous inflammation of the conjunctiva.

The left eye in particular was so severely attacked that it discharged tears and matter unceasingly. For this reason and on account of extreme sensibility to light a guard had to be worn constantly. Moreover the inflammation was not confined to the conjunctiva, but had spread to the cornea, and had caused an inflammation of the cornea. A similar treatment to that described in the foregoing case was adopted, and the healing process was in the main the same. The comparatively sound right eye became perfectly normal in about four weeks, while the left eye continued

to discharge and to be sensitive to light for another fortnight. It was not until towards the close of the treatment that an improvement set in, and finally both eyes presented a normal condition, except as regards the slight opacity of the cornea, which in the course of time will probably disappear altogether and entirely cease to interfere with the power of sight.

I could relate many such cases, but fear to tire the reader, as the course of the ailment and its cure is the same in all cases with but slight deviation. At all events sufficient proof is afforded by the one here described that the Natural Method of Healing produces the most certain and lasting results even in diseases of the eye.

CURE OF CATARRH OF THE CONJUNCTIVA.

Treated in the Bilz Sanatorium, Radebeul-Dresden.

The daughter of Mr. *R.*, manufacturer of B., had from childhood suffered from her eyes. From her twelfth year the ailment had become worse. All the doctors of the vicinity, as well as several professors of Breslau, had been consulted; quantities of remedies had been applied in the shape of salves, etc., but without success, nay, rather the reverse. Distinguished homœopathists were then consulted and for more than a year every possible homœopathic remedy was tried, belladonna, calcarea carb., iodine, thuja, graphite, and even the much lauded Aethiops antimonialis (cinnabar), and still no cure was effected. The resources of allopathy and homœopathy were exhausted.—"We are much concerned for our daughter, for it is pitiful to see how her sight grows worse and worse. Can you, dear Mr. *Bilz*, vouch for the success of the Natural Method of Healing in such a case? If so we will do anything to restore that most precious of all gifts, the sight to my daughter."—We replied that from our experience a treatment can never do any harm, and advised the parents strongly to send their daughter to our sanatorium. She came on Jan. 2nd, accompanied by her brother, and in reply to the questions put to her at the examination expressed herself as follows:

From my childhood I have had trouble with my eyes. From my twelfth year they have grown worse so that I can hardly see at all in sunlight.

Whenever I look at the light I have piercing pain in the eyes and head. The eyelids burn and discharge continually, and in the morning are completely closed up. Reading and writing is impossible.—Further examination disclosed that the internal organs were sound, but that the glands of the throat, neck and under the arm were especially swollen. Here we had to deal with a case of scrofula as indeed was evident by the

general state of the patient. The treatment adopted was as follows: Every other day a steam-bath with three-quarter pack followed by bath (86°). In the afternoon hip-bath (86°) and knee-jet, and on the other days foot steam-bath with thigh-jet in the morning, and bath (86°) in the afternoon. Massage of the throat daily, and three times a week shawl with calf-pack throughout the night.

From week to week improvement was made, the discharge from the eyes abated, the pains decreased, and in the short space of four weeks the patient was again able to read and write and even to look at the sunlight without experiencing any inconvenience. In proportion, however, as the secretion and inflammation of the eyes diminished, a number of boils broke out on other parts of the body, especially on the abdomen and legs, which discharged a quantity of evil-smelling pus, and so expelled directly from the body all the morbid matter from the blood which had formerly found an outlet by the eyes.

After a further treatment of four weeks these secretions ceased, and at the end of ten weeks the patient was in perfect health and left the sanatorium full of joy and hope.

CURE OF A CASE OF INFLAMMATION OF THE CORNEA.

By the Natural Healer Otto Wagner, Manager of the Bilz Sanatorium.

The much esteemed and respected tradesman Mr. *F.* had for a long time been suffering from his eyes, could hardly endure the pain, two doctors of reputation had been visiting him but neither could afford him any relief. Such was the talk of the town, and the genial man was universally pitied in that he had to suffer so severely without any prospect of being cured but rather with that of becoming totally blind. All possible means, such as salves, drops, etc., had been tried, but without success, on the contrary aggravation of the disorder was the only result. And so it came about that some adherents of our Method recomended the Natural Method of Healing. "It is of no use", was the answer, "the gentleman is old, fifty-two years of age, and not accustomed to water, moreover the doctors have already applied compresses with the result that they have made him worse."

At last, as all resources were exhausted, and the pain constantly increased, it was decided to give the Natural Method a trial in order to be able to say that nothing had been left undone. The writer of this account was asked to visit the patient and to give an opinion on the case.

An examination disclosed that the patient had been ill for six weeks and that the malady had been caused by a chill. At first he had merely

a slight inflammation of the eyelids, pressure and pain in the eye, extreme sensitiveness to light, and constant watering. The whole of the left eye was bloodshot and inflamed, and a purulent secretion began to be discharged, so that every morning the eyes were closed up. The doctor had been summoned and had given something to drop in the eye (nitrate of silver), and said it was nothing serious and would soon be all right. It did not become better, however, but grew daily worse. The inflammation had spread to the cornea, and whereas at first the pains were but slight, they now became intolerable.

This continued for fully a week, the doctor coming every day and no improvement resulting. As his condition became worse daily, another doctor was called in. After a consultation they prescribed atropin and cold compresses. The result was absolutely nil, the patient obtained no sleep on account of the excruciating pain, which had now spread over the whole head, and he was driven nearly out of his mind. Four hours before my visit the doctors had ordered leeches, his wife said this was as a last resource, and that they feared the worst.

This was the stage at which I had to treat the case. However, I held out hopes of complete recovery to the patient if my instructions were punctually carried out.

I explained that not merely the eye, but the whole body was diseased, and that a local treatment of the eye could only aggravate the malady. Above all I pointed to the irregular circulation of the blood, as indicated in the upper part of the body by the inflammation (hyperæmia), and in the lower part by the feeling of cold in the legs (anæmia), together with constipation for four days. I began by giving the patient an enema (86°), about a pint, which had to be repeated in a quarter of an hour and was then followed by abundant stool; then retentive enema, half a wine glass (64°). The feet were made warm by rubbing, the calves and throat packed (73°), and a hot-water bottle placed to the feet. On the eye and forehead I placed hot compresses (122°) to alleviate the pain, and had them changed every ten minutes, and the eye frequently dabbed with cool water. Within an hour of applying these simple remedies an improvement set in, the pain abated, and the patient felt better. In the evening a half-bath (93°) was given for ten minutes, followed by abdominal, calf and throat pack (73°), and hot compresses, as above, to allay the pain.

After these applications the patient slept a few hours for the first time.

Next day, however, the pains appeared again with renewed violence. Head steam-bath, alternated with abdominal and calf-packs, and foot steam-bath in the evening never failed to bring alleviation. And so this

simple treatment was continued in conjunction with light diet, milk, soups and plenty of fruit with daily enemata, and in a week the patient was to a great extent freed from his pain, had restful nights and improved appetite, and in ten days was able to get up. The inflammation subsided more and more, the pain disappeared entirely, and in three weeks the patient was completely cured. No one would have known by looking at him that he had passed through so severe an illness. How quickly and easily could he have been cured if he had recourse at once to the Natural Method, how many sleepless nights, how much trouble, pain and money would he have saved!

F.

Face, Beautifying the Skin of the, see "COMPLEXION, BEAUTIFYING THE".

FACE, VIOLENT PAIN IN THE, see "NEURALGIA" and also the following report of cure.

PAIN IN THE FACE CURED.

For two years I suffered from excruciating pains in the face which returned periodically and caused me the greatest torments, leaving me so weak that I was totally unable to work. A month's treatment in Dr. *Kleyner's* sanatorium near Chemnitz has radically cured me of this extremely painful malady, for which reason I gratefully testify to the fact and at the same time recommend most warmly and from conviction the above named sanatorium to all sufferers.

FACIAL CRAMP occurs, when predisposition is present, always after a chill, and attacks sometimes one and sometimes both sides of the face. It consists either of twitchings of the facial muscles or of complete paralysis, so that movement of the mouth is impossible. If it occurs frequently, permanent distortion of the features may be caused.

TREATMENT.—Vigorous rubbing of the parts affected, which is best done after a full steam-bath with mild steam compresses in the face, followed by bath of 88°, the face to be bathed in the same water, or a wet rubbing of the whole body (72°), and afterwards a stimulating compress on the same parts. Stimulating full packs must also be applied to produce profuse perspiration, with which local stimulating compresses are to be combined. Non-stimulating, but, perhaps, a mixed diet and fresh air. In cases of constipation, see "ENEMATA".

For deeply seated maladies a regenerative treatment is necessary.

In many cases electricity and massage, applied by a competent attendant, do good service.

For cramp of the lower jaw the same stimulating compresses as well as steam compresses, followed by bathing the jaw (86°), should be applied, as well as massage and gymnastic movements of the jaw (moving it to right and left). Moreover, external rubbing, kneading, and slapping, beginning at the mouth. For Modes of Application see Index.

Facial Erysipelas, see "ERYSIPELAS."

FAINTING (Swoon). This is a state which is usually connected with certain morbid conditions, and proceeds from them. The relation in which the person stands to the outside world is quickly, but, as a rule, only temporarily, interrupted. Consciousness as well as command over the body is suddenly lost, although in most cases no alarming or threatening symptoms appear.

In fainting fits the activity of the brain either ceases entirely or is, at any rate, entirely suspended. We must, therefore, distinguish between serious and slight swoons.

Wunderlich describes serious and slight swoons as follows: In slight cases the patient is sometimes suddenly (sometimes with rapid acceleration of the feeling), seized with a feeling of dizziness and instability of sensuous impressions; he cannot see plainly, the objects about him turn round and round—vertigo; his hearing is interrupted with by a humming and buzzing in his ears; he can no longer feel the ground, which seems to sink under his feet, so that he is unable to stand firm; he begins to totter and roll about; at the same time his forehead and limbs become cold; the former becomes covered with perspiration; his face and lips grow pale; his senses become obscured; everything is dark before his eyes; his hearing is gone, at the same time he feels sick and sometimes actually vomits; sometimes he falls to the ground quickly, and even almost suddenly; sometimes he has sufficient control over himself to leave the spot where he is and to sit down; the pulse is now faint, his breathing weak and sometimes snoring, the face is pale, consciousness not entirely lost, sometimes even a few slight, not altogether involuntary, movements are possible.

The attack passes off in a few seconds or minutes, and but seldom lasts as long as an hour. Sometimes with slight twitchings, stretching, etc., and with violent spasms, often with gaping and sighing, consciousness and the senses are restored, while the face becomes red and warmth returns to the hands and other parts of the body. The affected person

only feels a little weak, but in most cases relieved. The more serious forms or deep swoon (syncope), begin in the same way and often take an extremely rapid course. If the attack occurs in completeness, the patient lies motionless or with very weak pulse and hardly perceptible breathing and generally with open, staring eyes: his power of sensation is usually entirely suspended, but his sight and hearing may in some cases not be quite lost, the hearing in particular may be retained entirely and add greatly to the patient's anguish, he is not, however, capable of any movement whatever; he may be pricked, pinched and burnt without being awakened and even without moving a muscle; his appearance is often fairly natural except that he is usually pale; all secretion, except in the form of perspiration, is suspended; necessity for taking food is entirely absent, and, even if this may last for several days, no loss of flesh is visible, nor on waking is any remarkable hunger or thirst shown. This condition often lasts a tolerably long time, for several days, but in its most violent form and for very long periods is found almost exclusively in females. After waking there is usually no recollection; there are, however, cases in which the patient has known everything which has been done to him and has gone on around him. The most serious forms of swoon not infrequently result in death.

Causes.—Violent pain, great loss of blood, hyperæmia or anæmia of the brain, concussion of the brain, powerful electric currents (lightning), excessive heat or cold, breathing vitiated air or poisonous gases, muscular over-exertion, childbirth, moreover fright, surprise, joy, stupefying smells, tight lacing, heart disease, nervous fever, extreme weakness, etc.

Hysterical women with weak nerves are especially liable to fainting. In these cases fainting is not so serious (or only at the beginning of fever) as in full-blooded persons, with whom it may end in apoplexy.

Treatment.—To begin with comfortable horizontal position. In cases of hyperæmia in the head, however, keep the head raised and let the legs hang down, massage the neck and place compresses on the head; in cases of anæmia of the head, keep the head lower than the rest of the body, raise the legs and remove as quickly as possible or loosen all articles of dress which confine the neck and lower part of the body, then sprinkle temples, face, neck and chest of the patient with cold water and place the warm hand on the forehead; or, as sprinkling is often not sufficiently drastic, throw half a glassful or a glassful of water on the above mentioned parts, further rub the chest and back with hands dipped in cold water; see that the air in the room is pure and fresh. Pungent odors, such as burnt feathers, smelling salts, burnt hair or horn, etc., may often revive fainting persons.

In addition to the above a lukewarm (77°) enema should be given, followed by three-quarter steam-bath in bed of from one and a half to two hours' duration, and immediately afterwards a lukewarm (73°) wet rubbing of the whole body or a lukewarm (88°) bath followed by douche (77°), ditto the abdominal pack at night. With this treatment the application of magnetism (see "MAGNETISM") may be combined with success. For persons disposed to fainting, regenerative treatment. See also "FAINTING FITS" under Kneipp Cure. For Modes of Application, see Index.

FALLING ILL. "I feel a heaviness in all my limbs, I have hardly strength to move, I have got a constant feeling of shivering, I have no appetite, and can't sleep." These are the premonitory symptoms of "falling ill."

TREATMENT.—Our aim must be to take the sting out of the approaching disease and to nip it in the bud; we should, therefore, at once and without hesitation administer a full steam-bath in bed, or a steam-bath of from twenty-five to thirty minutes' duration followed by a full-pack, and, if a pain be left anywhere, an extra compress should be placed on that part. A window should be kept open during the pack. In case of fever a somewhat thicker sheet should be used, and it should not be wrung out quite so vigorously. Only a three-quarter pack should be given to children, as they feel very uncomfortable when their arms are confined.

The steam-bath in bed or full pack should be succeeded by a (89°) lukewarm bath, or, if this should not be convenient, by a lukewarm (73°) wet rubbing of the whole body. Massage (kneading of the whole body) during and after the bath is often very beneficial. A full enema (77°) should also be given before or after the pack; should a motion result, a half-cool (66°) enema should follow for absorption. A stimulating abdominal compress should be worn at night; in case of fever, however, a soothing, fairly wet trunk-pack, or bath, should be substituted. If the condition of the patient has not improved by the following morning, the above applications should be repeated during the day, and the treatment continued for several days, according to the patient's state. Other points to be attended to are—fresh air in the room, open-air exercise, when possible, non-stimulating diet and pure water in case of thirst. If some such treatment as described above (which can in no case do harm) be adopted at once, nine out of ten cases will run a favorable course. See also "CHILDREN'S DISEASES" and "BAD HEALTH."

Falling Sickness, see "EPILEPSY."

Fatigue, see "DEPRESSION."

FAVUS is principally met with in uncleanly people and appears on the head, in consequence of fungus growths.

SYMPTOMS.—At first small scales are formed, each pierced by a hair, which afterwards unite into straw-colored scabs of a round shape with a depression towards the outside. The hair inside the scabs fall out, and complete baldness may thus be the consequence. If, however, the skin underneath is not affected, the hair grows again. A general corruption of the humors and, above all, uncleanliness, is no doubt at the bottom of the disease.

TREATMENT.—Cut the hair short, soften the scabs with lukewarm water, then soap the scalp with lukewarm soap-water (soft soap) for a quarter of an hour three times daily, and afterwards wash the head in cold water, dry thoroughly (without hurting the scabs) and apply a little olive oil and unsalted butter, if practicable, stimulating dissolving compresses as likewise head steam-baths may be applied. Then a steam-bath in bed, succeeded by bath and douche, particularly of the head, every day. A strictly non-stimulating and vegetarian diet, abdominal compresses at night, frequent enemata, and plenty of fresh air are recommended. A strengthening treatment, or the preliminary regenerative cure, may be prescribed. For Modes of Application, see Index.

ANOTHER TREATMENT.—A lukewarm (90°) bath and bathing of the head once a day, or, by way of change, a tepid (77°) bath with wet rubbing of the whole body; two or three sweat packs, or steam-baths in bed once a week, for from an hour to an hour and a half, followed by a (90°) bath, also with bathing of the head. An abdominal compress at night or abdominal back and head-pack (77°) and wet rubbing in the morning will be found advantageous. Action of the bowels should be ensured, if necessary, by enemata, as above. See "SCALDHEAD."

KNEIPP CURE.—A warm abdominal compress every day for an hour and a half. Bathing with cold water every night, after first getting perpectly warm in bed. Immediately after bathing, the patient must go to bed again without drying himself. Continue this treatment for a week. Then a hip-bath every other day, and a half (partial) bath on the intervening days, each of half a minute's duration. An upper and knee affusion every other day. This to be continued for a fortnight. As subsequent treatment, two to four half (partial) baths a week. See "REPORTS OF CURE."

FEAR, MORBID, (general disquietude, palpitation, etc.). An attempt must be made to allay these by sundry soothing trunk packs.

FEATURES OF THE DIFFERENT RACES, see these figures.

European.



Fig. 128.

American.



Fig. 129.

Chinese.



Fig. 130.

Malay.



Fig. 131.

Australian.



Fig. 132.

Californian.



Fig. 133.

Asiatic.



Fig. 135.

Cretin.



Fig. 136.
See also "CRETINISM."

Febris Lactea, see "MILK FEVER."

Fecundation, see Index.

Feet, Covering for, see Index.

FEET, COLD. Chronic cold feet are always a sign of imperfect circulation and congestion of the blood which have a highly injurious effect upon the patient's condition and are the chief cause of a whole series of chronic affections, *e. g.*, determination of blood to the head, heaviness, vertigo, insomnia, affections of the chest and heart, chronic catarrh of the lungs, addominal complaints of all kinds, etc.

Treatment.—Walking barefooted daily in wet grass or on wet flags. Begin with from one to five minutes, according as the body can bear it, and bring it gradually up to a quarter of an hour and immediately afterwards take vigorous exercise until thoroughly warmed. Foot steam-bath twice a week for from twenty minutes to half an hour, followed by vigorous, cool (66°) rubbing of the feet with the bare hands and knead vigorously. Then exercise for an hour and walks in the open air.

In the case of bed-ridden patients the legs must be wrapped up in a blanket after being rubbed, and the foot steam-bath repeated as the feet become cold again.

The following treatment may also be given. After the morning wet rubbing of the whole body, vigorous kneading of the legs and feet (also arms and hands), followed by exercise, and in the evening vigorous kneading as above. Then foot steam-bath, followed by cold rubbing of the feet, dry thoroughly and knead again and put to bed.

Moreover, cool (59° to 66°) foot-baths of from three to five minutes' duration, are most beneficial, with the water up to the ankles, or bathing the soles of the feet. Before and after the bath, the patient must take a suitable amount of walking exercise, and, in fact, generally after a bath of this kind, must not rest until the feet are hot. If the patient is unable to walk, his feet must be rubbed warm. A bath of this kind may at first be of five minutes' and afterwards of longer duration, and the feet must be rubbed together in the bath constantly.

Before a bath of the kind is taken, as also before wet rubbing of the feet, the feet must be warmed either by vigorous rubbing with warm hands or flannel, or a foot steam-bath or hot foot-bath be taken.

A still better effect is said to be produced by commencing the above baths with water of 66° and gradually passing to a higher temperature. The rubbing of the feet and exercise afterwards must, however, in no case be omitted; see also "Footbath, Derivative."

The soles of the feet may be finally rubbed on straw matting, or other stuff of a coarse texture. Let the patients stand and rub the soles one after the other. As mentioned above, walking barefooted, or wading in sand, is by far the best remedy for cold feet and the best means of drawing the blood to that region.

Besides frequent kneading, etc., we recommend also frequent curative gymnastic exercises, such as trotting movements, extension motions for the legs and feet. See "CURATIVE GYMNASTICS."

Cold feet may be temporarily warmed by standing on the toes for one, two or three minutes (lifting oneself slowly upon them and then gradually sinking again) or by swinging oneself on them. This must, however, be repeated a few times.

KNEIPP CURE.—Walking barefooted, walking in the grass, in fresh snow, or on wet flags; knee or thigh-jets. For further information on Kneipp Cure, as well as on Modes of Application, see Index.

FEET, SWOLLEN, frequently occur with pregnant women, also with elderly people suffering from irregular distribution of the blood, or from heart or kidney disease. They are not uncommonly met with after febrile disorders, as scarlet fever, etc., especially when these have been treated medicinally.

TREATMENT.—Baths and foot steam-baths on alternate days, followed by cool, wet rubbing and wet foot-pack (66° to 73°), or dry foot-pack to induce perspiration of the feet. After this the feet should be rubbed with lukewarm water (73°) and with bare hands and well massaged. Then some vigorous open-air exercise should be taken. A wet rubbing of the whole body with water of 73°, or a bath of 89°, with rubbing of the skin should be given daily. Before and after a walk the feet may be bathed in cool water.

When swollen feet are accompanying symptoms of liver or kidney disease, the cure will be effected by the removal of the primary disorder.

KNEIPP CURE.—In addition to the water treatment given in the articles on diseases of the liver and kidneys, a cup of tea prepared from pewter grass, powdered danewort and rosemary should be taken morning and evening. For Modes of Application, see Index.

SWOLLEN FEET CURED.

from MELZER'S book.

A man was suffering from very bad feet; they were much swollen, the skin was cracked, and old, suppurating ulcers were visible on the ankles. He came to me after trying all manner of medical remedies without result. I cured him in about six weeks in the following manner. A strictly regular and natural course of life was observed; stimulating compresses were constantly worn on the lower legs, and wet lint was kept on the sores, and changed when the patient's comfort required it. Cooling bandages were often applied, together with frequent foot and leg baths

(55° to 66°) of half an hour's duration, stimulating abdominal compresses at night, and wet and dry sweating packs alternately in the daytime. As the patient was a man of an otherwise vigorous constitution, the cure was completed without any pills, plasters or ointments.

Female Breast, Atrophy of the, see "WOMEN, DISEASES OF."

Fen, Greek, see "FŒNUM GRÆCUM."

Fermentation, see Index.

FEVER, TREATMENT OF. In order not to necessitate, in urgent cases, the perusal of the whole of the treatise on the treatment of fever, we will here give two modes of treatment which have proved efficacious, namely, the treatment of fever I a, page 446, which will suffice in most cases of children suffering from a slight attack of fever, and treatment II a, page 448, which may be applied in cases where the fever reaches 40° to 42½° C. and more. Everything else will be found under "Treatment of fever," on pages 440 et sqq.

First of all see that the patient's feet are warm, and if they are not, try to render them so by rubbing them with your warm hands or a warm cloth, or by applying a hot-water bottle wrapped in wet cloths.

In case of constipation, immediately administer an enema in order to cause a movement of the bowels. If the patient is troubled with thirst, let him drink fresh water or water mixed with fruit juice as much as he likes. As soon as the patient has been placed in a pack, open the windows, but do not forget to close them again while removing the pack, and if he should feel uncomfortable with the packs on, a thing which children manifest by crying, remove them.

It is of signal importance that you should not hesitate to apply our treatment, nor suffer your doctor or some lady friend to dissuade you from applying it, a thing that principally happens to mothers who are as yet little acquainted with this method. Such a treatment can never do any harm, and will show excellent results in every single case. Not long ago my little girl, aged seven years, had a rather serious attack of fever, possibly she had conceived a cold. We immediately brought into requisition a tub-bath of 88° and in the following manner:

The little one was undressed and placed, standing upright, into the bath-tub, my wife rubbing the child's whole body upwards with her warm hands, which she occasionally dipped into the water, while I held the child. (In this manner a cool bath can be made so much more agreeable and less chilling to little children.)

The little one was then told to sit down in the bath, and we wetted her whole body and rubbed it thoroughly with our hands. Finally I

poured a good deal of the water in the bath over her, especially over the head, thus giving it a thorough cooling; at the same time I held my hand to the child's forehead and thus prevented the water from running down her face, a thing that children very much dislike. After the child had been thoroughly cooled and a shivering fit had set in, we placed her, wet as she was, upon a dry linen sheet which we had previously spread over a woolen blanket, wrapped the child up in these, not too tightly, and placed over it a down quilt. The head and face we then dried thoroughly, and, after this was done, the child slept soundly and peacefully for several hours. We repeated this process at night and twice daily for several days, later on only once a day, and were soon rejoicing in the fact that our child was well and hearty again.

In conjunction with this treatment care must be taken to get and keep the feet warm before and after the baths, and the bowels must be kept open by the administration of enemata, and only non-stimulating food may be given.

FEVER. Fever is a general excitement in the process of living, with an abnormal acceleration of certain functions of the system, especially a high pulse and a considerable generating of high temperature with a simultaneous disturbance of the functions of the nervous system and the digestion.

Fever is caused by physical or moral over-excitement, or by some injurious matter having been introduced into or generated within the system, the growing worse of an already existing illness, or by an injury to the body, serious enough to affect the whole organism.

Fever cannot, therefore, be classed as an independent morbid state, but is rather a state which makes its appearance while the organism is under abnormal exertion, thus eliminating an illness from the body and bringing it back to its normal condition.

This feverish state carries with it an over-amount of independent heat of the body, amounting to more than 99° F., or 37½° C., moreover, an acceleration of the pulse, causing it to beat over eighty to a hundred and twenty times a minute (how to feel a person's pulse, see Fig. 137), a quicker respiration and the sensation of alternating heat and shivering.

Besides these symptoms, there are usually excessive thirst, want of appetite, mostly a dry skin rarely showing any moisture whatever, pains, particularly in the head, the urine is of a dark color, showing some sediment; the feeling of general indisposition as though one had been beaten all over, weakness, mental depression and sometimes raving.

The participating of the whole organism in such a disturbance is really nothing but an assistance at a time when the organism must bring

into requisition its whole organic power in order to expel morbid matter from the body. Therefore fever cannot exactly be considered as an illness, but rather as an effort made by the organism for the purpose of eliminating such morbid matter as has found its way into the body, or else has been generated within it, therefore, fever ought to be hailed with a sense of relief, and it is not at all advisable to apply an indiscriminate cold-water treatment, much less to try to contend against it by injurious medicines. It is far more recommendable to regulate and support it, and for this purpose the following treatment of fever is given:

Through fever many a long illness has been removed, a fact well known to Prof. Dr. *Harless*, director of the medical clinical hospital at Bonn, for he has often, when about to undertake the treatment of a serious case without fever, been heard to exclaim angrily: "First give me the means of producing fever, and I will cure all diseases." These means of producing fever in serious and chronic feverless cases lie in a judicious feeding of the patient and in the keeping about him a warm moisture, for instance, by applying stimulating pack steam-baths in bed, steam-baths of the hands and feet, and principally in the carrying through of the regenerative treatment, which will produce a violent, feverish reaction of the body, which in its turn causes the dissolution and secretion of morbid matter chiefly through the skin, the rectum and the kidneys, thus restoring to the hampered organs freedom of action and radically removing the disease.

Feeling the pulse.

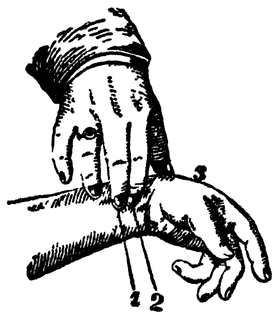


Fig. 137.

1, and 2) the place where the pulse can be felt when the fingers are placed there. 3) back of the left hand.

FEVER, Rules for Treatment of. 1. Always see that plenty of fresh air is admitted to the sick-room, therefore keep the window open either continually or at least by opening it frequently, the door also must be left open now and then, causing a slight draught and thereby removing the foul air. The temperature of the sick-room must be kept at from 58° to 65°.

A feverish patient cannot easily take cold.

2. As a beverage for the patient give from time to time soft, fresh spring water, a thing so eagerly coveted by most sufferers, because it serves to subdue the inner heat, dilutes the blood and humors, thus better

qualifying them to remove morbid matter; fruit juices may be poured into the water, and, if desired, buttermilk may be given to the patient.

3. If the patient shows any appetite, then give him cooling, non-stimulating food, chiefly oatmeal gruel and barley-broth, above all fruit, raw or better stewed, stewed berries, etc.; moreover, fruit-soups (see "PREPARATION OF NON-STIMULATING DISHES"), then broths of coarse meal and dried vegetables, which, if the patient's digestion is satisfactory, may be rendered more palatable by adding milk, a little butter, cream, etc.

4. Always see that the sufferer has warm feet, a thing that is rarely enjoyed by feverish persons. If the feet are cold, try to make them warm by rubbing them with hot, dry cloths or with your warm hands, or by applying to them a steam-bath in bed, consisting of wet cloths being wrapped round hot-water bottles, which latter are applied to the feet, the whole being wrapped in a woolen blanket, such a steam-bath to last from fifteen to thirty minutes. After this give the calves and feet a thorough wet rubbing with water of a temperature of 68° to 75°. You may also apply an ordinary steam-bath, or, in a stubborn case, a foot-bath of 106° to 117°, lasting from fifteen to sixteen minutes and followed by the above-mentioned rubbing down of the calves and feet.

5. In case of constipation, administer an enema of from 68° to 72°, make the patient take a tablespoonful of clear water and feed him on fruit, fruit-soups, butter-milk, etc., which will soon have the desired effect.

6. The hot head must not rest on a feather pillow, but on one stuffed with horse hair, or, still better, on a piece of cool linen brought into the shape of a pillow (not simply folded), which may be renewed from time to time. Cover the patient with a woolen blanket or a very thin feather-bed or down quilt.

7. If the throat is affected, the temperature very high, and the patient is troubled more or less with painful sensation in his head, chest, back or abdomen, which may be caused respectively by inflammation of the brain, lungs or bowels, then apply, besides the packs of from 66° to 77°, very wet compresses to the inflamed parts and renew them as soon as they get warm. Also wipe the hot head and face frequently with a piece of linen dipped into cool or cold water.

8. If the body reaches a temperature of 39° C. then put the patient into a bath of 90° to 98° and rub and knead him well with your hands until the temperature under his arms has become moderate which may be ascertained by applying your hand to that part of his body. As soon as the temperature increases again repeat the bath. In cases where

the temperature does not exceed 39° C. a very wet half or three-quarter pack or an abdominal pack only will suffice, the above mentioned baths to be brought into requisition only in the morning and at night. In cases of heart- and lung-diseases baths are prohibited. In such cases, and for children who are not accustomed to baths, use such of 88°, gradually reducing the temperature by two to three degrees.

The attendant may gradually add about half a quart of cold water, stirring the bath simultaneously so that the patient will not perceive this reduction of the temperature of the water.

There ought to be at least two attendants when a patient is being bathed.

9. Make the baths of children and adults suffering from anæmia two to four degrees warmer than usual. See "FEVER, TREATMENT OF, No. II".

10. The application of luke-warm water is particularly recommended to those suffering from fever.

11. A natural, sound sleep should not be disturbed by any mode of treatment. Feverish patients whose pulse, while asleep, reaches for instance 120 beats a minute, form an exception to this rule and ought in accordance with our rules of treatment either to be packed or bathed again or treated in some other suitable manner. Sleep is preferable to any mode of treatment, therefore put children who suffer from a slight attack of fever to bed at once and make them go to sleep. If besides this simple expedient you will bear in mind the admission of fresh air, give the little one cooling drinks and feed it on plain, non-stimulating dishes, you will find that in most cases nothing further is needed.

12. A person attacked by fever chiefly needs rest, and, therefore, the bed is the best place.

13. It is easily conceived that it is not propitious to the restoration of the patient to health to annoy him by too much activity near him or by pestering him by over-doing the treatment; it is far more important to give the organism time and rest in order to assert itself. That certainly does not mean that you should neglect the rules of treatment just given, on the contrary apply the suitable, particularly in serious cases assiduously and repeat it until the patient's temperature is reduced to its normal state.

Our method of treatment absolutely precludes all danger to the patient.

It is therefore our advice to parents not to treat lightly the indisposition felt by a child or above all any symptom indicating fever, but to take timely steps, for it is hard to tell what serious illness may be lurking in the background.

14. As soon as the fever has been somewhat reduced, a patient may go without treatment for a while, that is until the skin commences to get hot again and the cheeks to show an unusual redness.

15. At last, *i. e.* after you have succeeded in bringing the temperature back to its normal state, a daily lukewarm wet rubbing of the whole body (74° to 77°) or a lukewarm bath (86° to 89°) also taken daily, will suffice as invigorating and restorative agents.

Here we should also mention the abdominal or trunk pack, which is to be used during the whole time of the treatment of fever, lasting from five to thirty minutes at a time. This is now to be applied after each bath or rubbing down at intervals of from an hour to an hour and a half.

Thermometer.

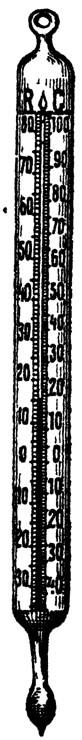


Fig. 138.

The scale on the left shows the degrees according to *Reaumur*, on the right according to *Celsius*.

16. A cool head, warm feet, open bowels; those are the three principal things that an attendant must see to in his patient, and particularly in those suffering from fever.

Besides this you must see that the skin of the patient is moist and perspiring, which is brought about by wet packs and by baths. In speaking of perspiration we do not mean that profuse perspiring which indicates a considerable derangement and weakness of the nerves of the skin.

17. If in examining a person suffering from fever a sounding (ausculation) of some parts of the body, for instance the back, chest or abdomen, is introduced in order to prove the existance of a disease or inflammation, such as inflammation of the lungs, place your hand or rather two adjoining fingers flatly upon the place to be sounded while you knock against them with one finger of the other hand. A muffled sound usually means an inflammation, swelling, etc., of some internal organ.

See "Examination, Method of".

See also the articles entitled "Medicine, Opinions of Medical Men on Taking", "Bad Health", "Sick, Cure of the". "Diet, Non-Stimulating", "Enemata". For Modes of Application see Index.

Treatment of Fever, I. In every case of fever it is of signal importance to ascertain its proper degree in order to apply the right treatment.

The most reliable information as regards the degree of fever and its possible increase is got by the use of the thermometer (Fig. 138). The most practical contrivance for ascertaining the exact temperature is the one by *Celsius* arranged on a decimal basis, which also is the most popular and is usually designated as "fever-thermometer".*) In order

Scale for Measuring Fever According to Celsius.

Morning.			*Evening.*
Critical change.	42,0	42,0	Critical change.
	41,5	41,5	Very high fever.
Very high fever.	41,0	41,0	
	40,5	40,5	
	40,0	40,0	High fever.
	39,5	39,5	
High fever.	39,0	39,0	Moderate fever.
Moderate fever.	38,5	38,5	Slight fever.
Slight fever.	38,0	38,0	Above normal.
Above normal.	37,5	37,5	
Normal.	37,0	37,0	Normal.
Below normal.	36,5	36,5	
	36,0	36,0	
Moderate fall.	35,5	35,5	Moderate fall.
	35,0	35,0	
	34,5	34,5	
Serious fall. Critical change.	34,0	34,0	Serious fall. Critical change.
	33,5	33,5	

Fig. 139.

*) In purchasing a thermometer never choose a cheap one. These do not show a correct measurement. The thermometer which we can most recommend to you is the one on the one side of which you can read the word "maximum." In a cheap thermometer there is usually the draw-back, that it will begin to drop immediately after being removed from the place where the measurement was taken, one is, therefore, obliged to look at the thermometer while it is still under the arm. This is an awkward thing especially after dark, as it obliges you to bring a dazzling light near the patient.

to save time either hold the ball containing the mercury in your hand or place it in some warm water, thus bringing it up to about 40°. For measurement the thermometer is usually placed under the arm of the patient. To get a correct measurement it is important that the upper part of the arm is pressed tightly to the body, in order to exclude the air. The thermometer may also be placed in the mouth with just the same result. The most reliable way, especially with infants, is the introduction of the thermometer into the rectum. In order to facilitate the introduction rub some oil upon the ball containing the mercury. To show a correct measurement of the temperature the thermometer must remain in some ten to fifteen minutes under the arm, and about five minutes in the rectum.

The thermometer by *Celsius* is divided into a hundred degrees (°), of which the degrees from thirty-seven to forty-two or forty-three are taken into consideration in cases of sickness. Under normal circumstances, *i. e.*, in healthy persons, the temperature of the blood rarely exceeds thirty-seven to thirty-seven and a quarter degrees. Anything in excess of these figures indicates fever.

If the blood reaches a temperature of 42° or 43° it congeals, and the patient is doomed to die. (Sometimes this takes place at 41½°). Between these degrees the fever vacillates, in light cases reaching about 39½°, in more serious ones exceeding it. (See scale for measuring fever, Figure 139.)

What a sense of relief a thermometer does sometimes give one, when about to take up the treatment of a serious case, especially at the bedside of a sick child.

I. I will here give four different modes of treatment which are particularly useful in cases of children suffering from slight fever.

a. Wet rubbing down of the whole body with water of 74° to 77° (lukewarm), followed by a rather wet compress around the abdomen of about 77°, perhaps stimulating compresses to the calves. Put the patient to bed.

b. A lukewarm bath of 88°, during which the whole body, especially the arms and legs, are to be well rubbed; after leaving the bath, rub dry especially the legs and feet, give abdominal pack also calf pack, and put the patient to bed.

In the maxima-thermometer this inconvenient feature is done away with, a simple contrivance marks the place reached by the mercury and the looking at the thermometer may be deferred to some more convenient time. In order to get the mercury back to its usual place, simply get hold of the upper end of the thermometer and shake it up and down a few times.

In connection with this bath pour water over the patient, taking it from the bath-tub and after a while mixing with water of a few degrees cooler.

The water in the bath-tub should be of a depth of from six to eight inches.

c. The same bath as mentioned under b, taking the patient and wrapping him up dripping-wet in linen sheet and a woolen blanket up to the very chin, and putting him to bed for half an hour to an hour or even longer.

d. A wet rubbing of the whole abdominal with water of 73° to 77°, hereafter a rather wet three-quarter pack placing a bottle filled with boiling hot water and wrapped in the wet cloths to the soles of the feet. The pack to be kept on for from an hour to an hour and a half. This last treatment is the most efficacious one, usually removing the fever and the lurking illness at the same time.

If a further improvement is desired, then give before the wet rubbing a foot steam-bath lasting from fifteen to twenty-five minutes.

For feverish cold see under "HEAD, COLD IN THE".

Whenever the patient awakes or leaves his bed after the appointed time, give him a bath of from 88 to 90 or a wet rubbing of the whole abdominal at a temperature of 77°.

Before placing the patient into the bath-tub, wrap round his head a wet towel which has been dipped into cold water and well wrung out.

If the fever decreases after the first bath, then you need not repeat it. If the fever returns to its original violence, immediately apply some one of the treatments given.

If the temperature increases and the patient becomes uneasy in the pack (abdominal, full pack, etc.), remove the packs before the appointed time, put him into a bath and then renew the pack.

If the fever does not give way after treatment, as given under d, having been repeated, but increases, the treatment of fever, given under IIa, must be brought into requisition. If the feet are cold, the throat affected, or great heat and pains are felt in the chest, backs, abdomen and head, then, as regards food, drink, sleep and admission of fresh air, have reference to the articles, "FEVER, RULES FOR THE TREATMENT OF," and "INTRODUCTION TO THE NATURAL METHOD OF HEALING".

Of the various kinds of treatment given under I., a, b, c, d, choose the one which is best suited for the condition of the patient and under the prevailing circumstances. For Modes of Application see Index.

Fever, Treatment of, II. Applicable up to 40° or 40½° C. Place the thermometer under the arm of the patient.

a. Two, three, and, if the fever is very high, even four very wet three-quarter or full packs of a temperature of 83° to 86°, and lasting from a quarter to half an hour. (Let the first two be of shorter, the last two of longer duration.) Then give a bath of 88° to 90°, lasting from ten to twenty minutes, only in exceptional cases as long as thirty minutes. Pour water over the patient, then rub him dry, especially the feet and put him back into bed.

Repeat the process as soon as the fever increases, and keep on repeating it until the fever has been removed or the temperature lowered (a thing that may not occur for days and weeks*).

Very serious cases necessitate the changing of the packs eighteen to twenty-four times in the twenty-four hours, and also three to four baths, but this is a rare thing. (See arm and leg packs, modes which are also applied in serious cases of fever.)

If the packs do not render the feet warm very soon, it is advisable to apply a bottle filled with boiling hot water and wrapped in moderately wet, hot towels or cloths.

Only if the patient feels comfortable in the packs applied to the whole body, use these, otherwise recourse must be had to the three-quarter packs.

Bear in mind that the appearance of perspiration is only then to be considered a favorable change, when, at the same time, a decrease in the beating of the pulse and in the temperature of the body take place.

Another thing to be observed after the removal of a serious attack of fever or inflammation is the nightly continuance of the abdominal packs and the legs for at least another fortnight, not omitting the daily wet rubbing of the whole body in order to eliminate all morbid matter and obviate the after-effects or a relapse.

After some illness attended with fever, as, for instance, scarlet-fever, whole or three-quarter packs are to be continued every other day for some time.

Treatment of fever under IIa is one of the most efficacious.

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*) The duration of a bath of a person suffering from fever is not to be extended beyond fifteen minutes, especially if sufficient attendance is not available. But a bath must also not last less than five minutes, for such a bath would have an indifferent effect only.

The bath-tub, and, if such a thing cannot pe procured, the wash-tub, should only have water not exceeding eighteen centimetres (about eight inches), as we mentioned before.

In preparing a bath for feverish patients refer to the article on "Baths," on account of the special hints given in it.

b) Full packs of from thirty to sixty minutes and more, always as long as the patient feels comfortable and the temperature does not increase. After that a bath of 88°, either pouring the water over the patient or omitting this feature of it, and rubbing his skin, especially his feet, legs and hands, and then putting him to bed. If the fever increases, repeat the treatment.

c) Instead of full pack as given under b, apply a three-quarter pack; and for the rest follow instructions given there. Refer also to soothing full or three-quarter packs.

d) 66° to 74° throat and arm packs, 72° to 76° abdominal and leg packs. The two first packs or compresses (around throat and arms) are usually changed after from fifteen to thirty minutes, the abdominal pack after the lapse of an hour, and the leg pack after two hours. In preparing the first three packs fold the linen several times, and do not wring the water out of it quite so much as the linen for the leg packs; it is well to use coarse linen for all packs.

In cases of high fever it is advisable, after the removal of all packs, to give a wet rubbing-down, washing of the whole body or a bath, repeating this two or three times a day. Before removing the packs take out the pins, while the patient is in bed, and loosen them so that no time is lost when taking the patient out of bed and placing him into the bath-tub. When applying a washing or a wet rubbing, this is otherwise, for then each pack must be removed singly, just before the treatment of each part of the body.

If the fever is moderate, rub the patient down only in the morning and at night, or bathe him in the morning and rub down at night. If it should be required, you may, in this particular case, leave the packs on a little longer.

If absolute repose is required for the patient, and he already shows signs of growing uneasy as soon as the abdominal or trunk-packs are applied, or even more so when placed in the bath-tub, then apply detergent leg-packs, reaching from the ankles to almost the top of the hip. This is a mode of application that will hardly disturb the patient. In connection with these packs, place moderately wet, coarse towels upon the chest and abdomen, passing the ends round as far as the patient's back, and covering them with some light woolen material. Let the temperature of the water, into which the towels are dipped, be about 72° to 76°, and change them at first every quarter of an hour, and then at longer intervals.

If the feet do not soon become warm in these leg-packs, then apply the hot-water bottle, wrapped in wet cloths, and remove it as soon as the desired effect has been produced.

Moreover, give the patient a wet rubbing or washing-down of the whole abdominal. Do this twice (morning and night) or more times a day, also administer several lukewarm enemata.

These treatments of fever, given under d, are warmly recommended in many cases, even in cases of typhoid fever.

e) A wet rubbing or washing-down at 72° to 77°, followed immediately by a cane-chair steam-bath, using a cane-bottomed chair especially constructed for the purpose. Here the steam bottles are principally placed under the feet and the lower part of the leg. It is well during this steam-bath to wipe frequently the inflamed, painful parts of the abdomen, chest, throat or head with the hands dipped into cool or lukewarm water, or to cool them by either placing your cool hands upon them or by applying pieces of linen, dipped in water of 72° to 77°, and wrung out, but slightly leaving them uncovered.

The steam-bath is followed by a wet rubbing or washing-down of the whole body with water of 68° to 72°, then the patient is put to bed.

As soon as the fever increases, repeat this treatment.

Instead of this chair steam-bath one may use a foot steam-bath or a partial steam-bath. Immediately before the steam-bath the patient should be subjected to a treatment of detergent massage; this must be done by a professional masseur.

This treatment of fever is only advisable if it can be done by an experienced hand, as otherwise it may have a dangerous effect, especially if indiscriminately applied.

If applied by a non-professional person, it is best to bear the following rules in mind:

1. The steam-baths must immediately cease as soon as the patient shows unusual signs of excitement, such as an increased palpitation of the heart or a more rapid circulation of the blood.

2. Do not expose the patient to too much heat in applying the steam-bath, it is not necessary, nor must a profuse perspiration be brought out. We do not at all believe in forcing things. If the steam-bath does not produce perspiration, it will soon after make its appearance.

3. Attend to the cooling and soothing of the painful and inflamed places repeatedly if the patient feels hot and uncomfortable.

This may also be done with the face and chest, even if there are no signs of inflammation.

f) A bath of 88° to 90°, pouring the water over the abdominal, and rubbing the skin well, especially the legs and arms.

The bath is to last for from ten to twenty minutes or, at least, until the patient has become thoroughly cool, and the armpits are quite cool.

Either dry the body well and apply an abdominal-pack and put the patient to bed, or it is also advisable to dry and rub the legs and feet first, and then to apply whole or three-quarter packs (75°), after having wiped the water off with your hands.

Keep on the packs for from three-quarters of an hour to an hour and a quarter, that is, if the patient feels comfortable in them.

This treatment also must be repeated often and continued until the temperature has been reduced.

If woolen blankets, etc., are not available for the packs, repeat the bath as often as required.

If an adequately large bath-tub or wash-tub cannot be procured, a repeated washing or mild wet rubbing of the whole body with water of a temperature of 72° to 77° may be had recourse to; act according to instructions given under treatment of fever IIc.

g) In treating persons suffering from anæmia, or such who do not easily get warm and do not perspire, introduce first a foot, half or three-quarter steam-bath lasting from fifteen to thirty minutes. Thereupon 78° affusions in the bath-tub, then apply for three-quarters of an hour a dry or wet three-quarter or full-pack, followed by a bath of 88° to 99°, or a wet rubbing of the whole abdominal with water of a temperature of 72° to 80°, according to circumstances. For Modes of Application see Index.

In order to give exhaustive instructions in regard to the treatment of fever, a third is given here, although the fever treatment given under II. ought to suffice in nearly all cases.

This third treatment of fever is principally to be applied in cases of very high fever.

Fever, Treatment of, III. This treatment is applicable in cases where the fever reaches 40° to 40½° C. Place the thermometer under the patient's arms.

a) Remove the bed-covers, spread a moderately thick woolen blanket reaching from chin to toes over the bed and spread over this two to three linen sheets wrung out in water of 65° to 73° (the linen sheets should be a little smaller than the blanket), pack the patient in them as follows: First wrap the sheets around the patient, and then cover with the blanket, drawing all moderately tight, and then put on bed-cover. The feet are simply wrapped in wet cloths, or hot-water bottles wrapped in wet cloths, are applied in order to prevent cold feet or congestion of blood to the

head, heart, etc. The patient's feet should not be allowed to get cold. The patient remains in the pack until an increased congestion of blood to the head, a reddening of the cheeks and uneasiness are noticed, which first takes place after from one to four hours, and in patients who are getting better after a longer period. As soon as the patient begins to feel uncomfortable, take off the pack and renew it (this is also to be done when applying fever treatment IIIb). While preparing the pack take the patient out of bed and cover him up well.

It is well to have two beds and two blankets, etc. etc., as this enables one to prepare the new pack just before being required, and to remove the patient straight from the old pack into the fresh one.

This fever soothing pack resembles the full pack, and is similarly applied. See Index.

b) As soon as the patient's condition has somewhat improved, as for instance in cases of typhoid fever when the delirium has somewhat subsided, this pack may be exchanged for one reaching only to the arm-pits, in which the patient should remain from two to four hours without feeling uneasy. After being taken out of the pack the patient may remain without any for some time, that is until the skin begins to get hot and dry again, when the pack must be renewed.

Some very excitable patients, especially children who are very feverish, have a feeling of oppression when the arms are confined in the pack. In such cases the pack should only reach to the arm-pits.

It is well to see that the abdomen and the thorax are covered with a few more layers of wet linen than the other parts of the body. For this purpose place a couple of wet towels just where the abdomen and thorax are to lie, and wrap these round them before the sheet of the pack is drawn over the rest of the body. The same may be done in applying fever treatment IIa.

c) When the necessary attendants and the necessary articles for this treatment are beyond the reach of the sick, as is often the case among the poorer classes, then act according to the instructions given by Dr. *Gleiche*, viz. take a linen table-cloth or bed-sheet, dip it into water of 65° to 77° and wring it out, then fold it up into four layers and place it upon the bare body of the patient, so that it reaches from the throat to the feet, and place over it a dry cloth, similarly folded; thus only the back part of the patient's body remains free from the pack.

This treatment is easily applied and also has a very good effect. As soon as the temperature has reached such a height that the cheeks begin to get red, then renew the pack immediately or after a short interval.

This latter treatment is also recommended in cases where the patient cannot be easily moved.

Choose among the various treatments given under III, always the one which suits the condition of the patient and the prevailing circumstances.

The various modes of treatment of fever as given under I, II and III, are not to be considered as absolute rules, so that, for instance, persons suffering from fever reaching 40° to 40½° C. may not be treated just as well according to instructions given under 2, or that cases with 38° to 38½° C. may not also be treated according to treatment of fever II; not at all, the idea is rather to choose the treatment most suitable to the circumstances, even if it is not the one given under that particular degree of fever. We only consider the treatments we give in each case as the most suitable ones from a general point of view, and they are to be considered as a regulating basis. Therefore in every case the proper judgement must be used.

The treatments that are most recommendable are those given under Id, IIa, IId, IIf and IIIa. For Modes of Applications see Index. See also "FEVER TREATMENT" in Kneipp cure.

FEVER, TORPID CONDITION OF (Torpor). This is a more or less rapidly developing loss of vital power and following acute febrile diseases, principally typhoid fever, a condition of absolute weakness, in fact a mental and bodily torpor.

Violent and long protracted fever has brought the nerves down to a very low condition, the vital power is lamed and the action of the skin has become very indifferent, the pulse is rapid, all the organic functions sluggish, the memory weak and the patient lies in bed languid and silent.

In such a case the physician usually does not know what to do, his old reliable remedies are of no avail, such a state is usually the harbinger of death.

According to our method of treatment such a case is not at all as hopeless as it seems, it is only necessary that the treatment be undertaken by an experienced person, and if that is the case a cure will in the majority of cases be effected.

FIRST TREATMENT. In less serious cases of torpor it suffices to sprinkle or wash the forehead, face and chest with a little cool water of 54° to 59°; this will serve to bring back life to the organism, skin and nerves, reduce the rápid pulse, remove the delirium and improve the mental condition.

SECOND TREATMENT (in more serious cases). Vigorous wet rubbing of the whole body with cool water of from 65° to 68°, or a bath of

from 65° to 81° in a bath-tub with the water reaching to about eight inches, at the same time cautiously pouring water of 73° over the patient and rubbing him vigorously.

According to circumstances apply a steam-bath, pouring water of 73° over the patient, and after rubbing him down with the hands, place him upon a dry linen bed-sheet, wrapping him up in it as well as in a woolen blanket and leaving him until reaction sets in, *i. e.* until he gets warm again.

This may be repeated from one to three times every twenty-four hours.

Third Treatment. Also very vigorous wet rubbing of the whole body with water of 65°, then rub dry with warm hands, wrap the patient up in one or two woolen blankets and cover him up well with the bed-cover. It is well to apply hot-water bottles to the feet as in giving steam-bath in bed (Treatment No. I).

If after the lapse of two to three hours, after which time the patient will rouse himself from his torpid condition, you perceive an evil-smelling perspiration, then apply a bath of 88°.

If fever sets in during any of the just mentioned treatments, use the three-quarter packs, given in treatment IIc.

Former natural healers, as for instance *Theod. Hahn*, used to even apply a cold, but very vigorous rubbing of the whole body, or a rapid washing down; also daily one to two cold full packs of short duration, or short tub-baths, with a sufficient number of attendants, so as to rub well the arms and legs, then the patient was dried and placed back into bed in order to get warm again; these proceedings used to have the desired effect upon the torpid condition of the fever.

The full packs and partial baths just mentioned were only brought into requisition in cases where the fever was very high, indeed, in the torpid state, and where the patient was still in a comparatively vigorous condition and well able to stand these applications.

We must again repeat that the mode of treatment must always be chosen to suit the condition of the patient and the circumstances.

Theodor Hahn says in his book: "How often have I heard patients who had already been lying unconscious and in delirium for weeks, and had been given up by the physician and their people, exclaim after the first few mild applications of cold water treatment: 'What a relief, it's just like heaven!' and yet even to this very day hundreds and thousands sink into their graves, unrelieved, not saved from this torpid condition of fever."

Supplement to Treatment of Fever.—Besides the other requisites, a fairly large bath-tub or wash-tub with water of about twelve to eighteen

centimetres (about eight inches), that is a little more than the length of a hand, linen sheets, woolen blankets, etc., and hot-water bottles (for cold feet and detergent purposes), you require a *Fahrenheit* and a centigrade thermometer, the latter is the so-called fever thermometer.

With the former thermometer one usually measures the temperature of the water, with the latter the degree of fever in a patient. For the latter purpose, place the bulb containing the mercury under the armpit of the patient, pressing the arm slightly upon the chest. Over 99° F., or 37½° C., indicate fever, the temperature in the morning and the evening is about 1° F. higher.

It is best to buy a thermometer showing both scales. It is absolutely necessary for the thermometer to have been tested as to its correctness, as it happens ordinarily that the cheaper ones have not been tested and often vary by about two or more degrees and thus are quite useless, especially in measuring the degree of fever.

If you do not own a thermometer, see "TEMPERATURE OF SUPERFICIAL MEASUREMENT."

The linen sheet, as used for compresses or packs (described in the Modes of Application under trunk-pack, abdominal pack, full or three-quarter pack, etc.), when applied to fever patients, is generally taken two or three thicknesses and not wrung out too much if used for feet and legs, but if used for full or three-quarter packs, one layer only should be used. *Soothing* full or three-quarter packs should always be applied in fever cases. In packing the legs, a wet towel is placed under the upper and lower part of the body, this is first wrapped round the body and then comes the linen sheet over which the blanket is wrapped.

If in serious cases a cooling of the head is necessary, then wet those parts that are not touched by the pillow, *viz.*, the face and forehead, in short intervals of from three to five minutes with water of 77°, using your hand or a sponge; the moisture in evaporating produces coolness; cooling compresses, which have to be changed frequently, are less agreeable.

In lighter cases, or in cases of fever, you may use water of a lower temperature, or apply cool or cold compresses to the head.

We have not pointed out any particular modes of treatment in cases of illness with fever, in order to give the person attending the patient the choice of the one best suited for the particular case and to the circumstances.

They are of a fever-soothing nature.

Thus, for instance, where a bath-tub cannot be procured, choose a mode of treatment without the bath, or if a woolen blanket or a linen

sheet are not available, then apply a mode of treatment without the full or three-quarter pack, etc.

CURE OF FEVER, INFLAMMATION OF THE LUNGS AND PERICARDITIS.

By G. Weicker, natural healer.*

If I venture to allot to the following report of a cure a little more space then is usually done, I have my reasons for doing so. My principal reason is that the patient is no less a person than the well-known historian, Dr. W. *Oncken*, professor at the university of Giessen, whose severe sufferings, inflammation of the lungs, aggravated by nervous fever and cutaneous eruptions (exanthematic pneumonic typhus) at one time excited general sympathy.

On the 21st of October of last year, Prof. D. *Oncken* became aware of symptoms (piercing pains in his body, particularly under the left shoulder plate), which he took for a sudden attack of rheumatism. He accordingly went to bed, where he remained until the afternoon of the following day (22d of October), when, the pains having left him, he got up again, thinking himself cured.

On the following day (23d of October) the pains returned with redoubled violence. The act of breathing as well as every movement produced considerable pains in the chest, symptoms which were taken by the professor for the immediate effects of rheumatism. In the afternoon Prof. *Oncken* sent for a physician, Dr. *X.*, who visited him three times on that day (at four, seven and ten o'clock), and each time administered to the patient, at his request, a subcutaneous injection of morphine near the aching shoulder. After these subcutaneous injections the pains, of course, abated, but respiration became more difficult, so that the patient was quite unable to lie down and had to pass the night in an arm-chair.

On the 24th of October, Dr. *X.* made a fourth injection of morphine on the left side of the chest, and about noon applied electricity. As neither of these expedients had the desired effect, Dr. *X.* prepared himself to examine the patient thoroughly. After this first more thorough examination, Dr. *X.* told the professor that he was suffering from pneumonia, and pointed out the left lobe of the lungs as the seat of the disease. He then prescribed the application of an ice-bag to the chest, gave hydric chloride in water, strong wine and from time to time what is here known under the name "Knickebein," which is made of two

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***) I have been obliged to considerably shorten this report of a cure, which is given more at length in a publication devoted to these matters, on account of limited space.**

liquors with the yolk of an egg between them, in order, as he said, to keep up the action of the heart.

On the 25th of October, Dr. *X*. visited his patient three times. He counted sixty respirations a minute, and the thermometer showed fever of 39.6° C. Dr. *X*. prescribed antipyrine, of which powders, bitter and offensive to the taste, as the patient called them, six were taken altogether on that and the following day. The diet was restricted to eggs, beef-tea, wine and milk. The patient grew weaker, the digestion was bad, the evacuation of the bowels irregular, and the tongue much coated during the last four days.

Mrs. *Oncken*, who had noticed a bad effect produced by the ice-bag, which was worn by the patient with great repugnance, proposed to have it replaced by wet compresses. Dr. *X*. did not coincide with her view of the matter, as he expected the best results from that very ice-bag. In spite of the ice-bag and repeated doses of quinine, the patient continued to grow worse, as may be inferred from by the fact that on the 28th of October Dr. *X*. called seven times.

In the evening of that day he pronounced the condition of the patient to be dangerous, as pericarditis had set in, and insisted upon the additional advice of Prof. Dr. *R*., also a medical man. "Make haste, pray, make haste, you owe that to your father," he called to Miss E. *Oncken*, who was getting ready to summon Dr. *R*. Dr. *R*. made his appearance without loss of time, and not only corroborated the correctness of Dr. *X*.'s diagnosis, but also agreed with him in regard to the treatment, particularly as far as the use of the ice-bag and the doses of wine and "Knickebein" were concerned.

This, in connection with the deplorable condition of her husband, made such an impression upon Mrs. *Oncken* that her faith in medical treatment, which had not been able to avert such a change for the worse (setting in of pericarditis), was utterly shaken. This she told Dr. *X*. plainly, who after that discontinued his calls. In the meantime Miss *E. Oncken* had requested a friend of theirs, a Mrs. *Spohr*, wife of a lieutenant-colonel, to visit her mother who was nearly beside herself with grief on account of the dangerous condition her husband was in. Mrs. *Spohr* called, and after having been informed as to the condition of the patient and what the doctors had said and done, declared that she was not only averse to all medical treatment, but was moreover quite sure that the application of the ice-bag had really brought on pericarditis.

Mrs. *Spohr* being the wife of the well-known natural healer, Colonel *Spohr*, an officer in active service, was well acquainted with the Natural Method of Healing, and warmly recommended it to Mrs. *Oncken*, who, in her turn, decided to put the treatment of her husband into the hands

of a natural healer. The following account shows us that the patient was soon cured, and how it was done.

The treatment applied by the natural healer consisted mainly of baths, the water being poured over the patient; furthermore, of lukewarm, wet compresses to the chest and back, and cool compresses to the head, all of which were frequently changed. In connection with this treatment employed, as packs and hot-water bottles to the feet, were a detergent. Then he introduced the full pack, lukewarm washing-down of the whole body and the trunk, and, moreover, frequent lukewarm enemata.

For the rest it was seen that the patient had plenty of fresh air, was given fresh water for a beverage and fed on non-stimulating dishes, such as barley-broth, rice, etc., with the addition of fruit.

Prof. Oncken published a letter of thanks in a newspaper, wherein he said that the natural healer *Weicker* had cured him completely after treating him for three weeks, spoke of the gratitude he owed him, and has since then become a regular subscriber to publications treating of the Natural Method of Healing.

FEVER, TYPHUS AND PNEUMONIA CURED.

By Mr. Canitz, Natural Healer.

On the 6th of March I was called upon to attend to a female patient who had, for five consecutive weeks, been under the treatment of a titled medical man. One would think the titles of this gentleman were surely a sufficient guarantee, not only for his attainments in regard to science, but also for a distinguished medical career, and no doubt they were, yet he had given up all hopes of curing this patient and had left himself a loop-hole by advising her removal to the hospital. After a treatment of five weeks, an illness that the physician had pronounced to be slight and which he undertook to cure in three to four days, had developed into one of so serious a character that he lost courage and was anxious to throw the responsibility upon a hospital. But the patient was in no condition to be moved, nor would the husband consent to be parted from his wife—perhaps forever. Under such circumstances I was called in to "try" the Natural Method of Healing. This is often the case, when nothing will avail; then it is in our method they take refuge. Sometimes it is even too late for that. Yet those who so implicitly believe in medical treatment will not be advised. With a blind "faith," which in such a case is synonymous with and amounts to nothing but rank prejudice, they go and pay the penalty of their folly, and then, after long and rational persuasion, they at last consent—to make a trial. Thus it is and probably will be for some time to come.

Well, the patient, a young married woman, was given up. I found her with about 41° of fever, with the milt swollen and painful, the abdomen also swollen, a rapid pulse, the tongue thickly furred, both lobes of the lungs affected by pneumonia, a bad cough which continued day and night, surely an agglomeration of symptoms that left nothing to be desired.

I had not at my disposal very efficient appliances, nor sufficient attendance in coping with so serious a case, or, rather, in carrying out my fixed intention of saving the patient from almost certain death. There was an old woman-servant, and the husband, who had to be at his work from seven in the morning until seven at night, but neither could be of but little use to me. Baths, even if they could have been prepared, would have been of no earthly use, as the patient could not stir, and the servant was too weak to move her. Therefore, I had to act without loss of time, and had to have recourse to the simplest possible means. That the means I chose were the right ones, was proved by the fact that after the lapse of two days the symptoms abated, and that after the first night coughing and fever had disappeared and the general condition of the patient had improved. Surely, you could not expect more. And what had been done? For the first four days I applied compresses of 73° to 77° to the chest and the abdomen, which were changed, according to requirement, every half or full hour. I also applied leg and wrist packs, changing these every two or three hours. Every morning and evening I washed down the trunk of the patient with water of 77°, and the arms and legs with such of 73°. After the fourth day I was able to apply a trunk and shoulder pack, as the patient was able to sit up. The diet was of a vegetarian kind, and I paid strict attention to the continual admission of fresh air through the window. And the result? The result was simply brilliant. The patient, who had been assigned to death, is well and hearty again and thoroughly enjoys life.

This shows that the simplest mode of treatment is at the same time the best guarantee for a successful cure.

FEVER AND DIPHTHERIA OF A SERIOUS NATURE CURED.

Related by Eduard Flechsig, of Glauchau.

At the beginning of this year three of my children lay ill with diphtheria; one of them especially, a boy ten years of age, was so bad that he lay quite unconscious and I began to lose all hope. The foul smell that emanated from his mouth was so strong that, in spite of the fact that the sick room was kept well aired, it could easily be noticed in the adjoining room. Under such circumstances it was that Herr *Kahle*,

natural healer in our town, undertook the treatment of the child. After a lukewarm washing-down of the body, he applied the three-quarter pack and hot-water bottles to the feet and sides, and sprinkled the cavity of the mouth and the nostrils with water, using a spray-diffuser for the purpose. Before perspiration set in, he applied cooling compresses to the head. After this followed a short rubbing-down of 86°, a bath of 86°, pouring water of 82° over the patient, then we put him into a hip-bath for twenty minutes with hot-water bottles to his feet, and after that a dry pack was applied also of hot-water bottles at the feet. A few hours later a calf-pack was resorted to, and after a short interval of rest the three-quarter pack in the manner just described. The compresses of the throat were repeated without intermission, and as soon as the inside of the mouth and the throat was dry the spray-diffuser was used. By administering lukewarm enemata a lot of fungi were got rid of through the rectum on the following day. After the first packing a change for the better could be noticed, and I was soon overjoyed to find that my child had recovered completely, without being harassed by the usual after-effects of this dread disease. A hoarseness, which continued for some time, was the best proof that the larynx had already been affected.

At the same time my sickly little girl, eight years of age, had a serious relapse of diphtheria, and was also restored to health by Dr. *Kahle.*

As the gentleman, in his modesty, has so far not made any use of the brilliant results of his mode of treatment, I think it incumbent on myself to bring this case to the notice of the general public, and herewith to thank him once more with all my heart.

TREATMENT OF FEVER. REPORT OF A CASE.

by the Reverend Mr. Zippel, of Malmerswende.

In one of my children, a boy of five years of age, I noticed the following symptoms: want of appetite, pains in the throat, repeated crying, restlessness in his sleep, peevishness, and, above all, a high temperature of the body. This condition, without getting much worse, continued for several days, and I began to think that the breaking-out of same lurking illness might be prevented by timely interference. I, therefore, commenced to treat the boy in accordance with the rules of the Natural Method of Healing. First I placed around the boy a regular wet pack of about 66°, putting a piece of cool, wet linen upon his head. Directly after this proceeding the patient went to sleep but woke up again after the lapse of half an hour. I gently persuaded him to remain in the pack for another quarter of an hour, but after that time he got more and more restless and we had to take him out. Upon another bedstead we had

spread a woolen blanket, and over it a wet sheet. The boy was now taken out of the first pack, and, steaming with heat, we wrapped him up in the second one. At first he again became unruly when the cold, wet sheet was wrapped round his hot body, but as soon as the packing was completed he went to sleep again. This time less heat was generated, and he slept for nearly three-quarters of an hour. He was to have a third pack, but I was rather short of time that day, therefore, I applied the final process; taking the little patient out of the wrapping, I placed him into a bath-tub and poured water of 77° over him and then had him well rubbed dry. After that we put him back to bed in order to get him thoroughly warm again, and as soon as that had taken place, which was indicated by the getting warm of the feet, we took him out again and he was dressed. And now, dear reader, you may hear and be surprised. All the symptoms of sickness had disappeared. The boy was jolly, wanted to eat, swallowed his food without its causing him any pain in the throat, and slept excellently that night. The next morning he got up perfectly well, and those symptoms did not reappear. The threatening illness had been nipped in the bud by timely intervention. (I should advise water of from 10° to 12° warmer.—THE AUTHOR.)

TREATMENT OF FEVER. ANOTHER CASE.

Taken from Dr. MUNDE's book.

A somewhat malignant epidemic of scarlet fever was raging in Freiberg when I returned from Gräfenberg in the winter. Two of my children were attacked by it, *viz.*, my eldest boy, aged seven, and my second, aged four. As soon as I became aware of symptoms of indisposition in my eldest boy, I began to apply the wet packs. As this system of treatment was not very well known at that time, my wife, who did not then possess the right faith, allowed herself to be disturbed in her mind by my medical friend, Dr. *Beckert*, and discontinued the packs for twenty-four hours, during an unavoidable absence on my part, without saying anything about it on my return. The next day the patient complained of severe headache, especially in the back of the head, and of intolerable pains all over his body. The exanthema, which had already appeared, had nearly vanished, and the little that remained was of a livid color. All the symptoms pointed to an access of a torpid nervous condition, the brain being specially affected, and my friend was so alarmed that he confidently prophesied that the child would not live another day. As a novice, I, too, began to feel uneasy, and was beginning to doubt the efficacy of the wet pack, when I heard of the non-compliance with my directions. My want of faith in medical treatment, to which six of my children had already fallen victims, encouraged me, in spite of my short

experience, to stick to the Natural Method of Healing. The case, however, was a new one to me. A brain affection of this kind in scarlet fever had not been met with in Gräfenberg, and I had to find a remedy myself; for the packs brought little relief. Having seen something of the good results of hip-baths in affections of the head, it occured to me to give this remedy a trial, and, in spite of the opposition of my wife and my mother, and the assurances of my friend *Beckert* that I should kill the boy, I put the patient in a hip-bath of about 66°, covered him well with blankets, and applied a cold wet bandage to his head. I kept him in the bath for a little over half an hour. It was impossible to rub him, as the least touch on any part of his body caused him intense pain, for which reason I also put a folded sheet at the bottom of the bath. During the bath he was free from headache, and the pains in his body were diminished. After the bath I again placed him in a wet pack and left him in it till the pains returned. I then again had recourse to the hip-bath, and I continued these two appliances alternately through the night, the disquieting symptoms finally subsiding in the morning. I gave the first hip-bath at five o'clock in the evening, and at eleven the next morning, when Dr. *B.* cautiously put his head in at the door to see if the lad was dead, he found him dressed and without pain. The astonishment of my friend can readily be imagined, and he was inclined to attribute the result rather to a miracle than to the effect of water. Notwithstanding the favorable result he blamed my foolhardiness. The boy ought not by rights to be alive.

To the urgent request of my friend to be allowed to prescribe something for the patient, I had, in view of the success of my treatment, no hesitation in replying that I thought I could manage the case on my own responsibility, and that if the worst were to happen, the lad would be no worse off than my other six children, who might have been alive if I had gone to Gräfenberg earlier. I was at that time looked upon as a water crank and laughed at in spite of all my successes. I took no notice, however, either of remarks or of shrugs of the shoulder, and when the pain returned in the evening, probably because the patient had been too long out of bed, and the perspiration interrupted, I repeated the hip-bath and pack, till the pain again subsided. I now gave two packs daily, till the desquamation, which was attended with only slight eruption, had nearly ceased, and on the tenth day after the appearance of the disease, a clear but cold winter's day, I allowed the patient to go out into the street with his brother, who had been attacked by the disease two days later, and play in the snow. The packs were now reduced to one daily, and it was after one of these packs that the patient was allowed to go out for a walk for the first time. The younger boy had

the complaint only very slightly, and both brothers recovered in a much shorter time than is usually the case, either because the plain diet and daily cold bathing had an influence upon the duration of the disease, or because the latter had been shortened by the early application of the wet packs.

I discovered afterwards that, in nearly every case which I treated, the patient was able to go out in from ten to fourteen days. In summer I allowed this always on the tenth or eleventh day. I cannot remember a single case, even in winter, in which the patient was confined to his room for more than three weeks. The patient must not be allowed to stay out of doors too long at first, or to sit down or stand still. It is far better to play at snow-balling, barbarous as this may sound to an anxious mother.

A Canadian merchant came to my office in New York one evening in February, 1851, complaining of fever and sore throat. I examined his mouth, feet and pulse and advised him to return home and go to bed as he had probably got scarlet fever. I called on him next morning and found him suffering from severe fever and pain in the throat. As he was living in a boarding house with no male servants, and as I was at the time without a bath assistant, I washed him myself, applied compresses to his throat and stomach and advised him to drink water and remain in bed. I opened a window in the adjoining room, and advised his landlady not to heat the room too much, and to give him fresh drinking water now and then. The fever increased in the evening, and the eruption began to make its appearance on the following morning. At the same time his temperature and the frequency of his pulse increased to such an extent that I deemed it necessary to put him in a pack. I had, of course, to do it myself, and to remain with the patient while he was in it. I changed his sheet three times, which made him feel more comfortable, the eruption being plainly visible beneath the perspiration. I administered the pack a few times in the evening, and twice on the following day. The skin remained moist after the pack, the pain in the throat soon disappeared entirely, and on the tenth day after his first visit, we went up Broadway together in snowy weather, ate a pheasant at Sinclair's, and afterwards took a further walk for half an hour. Some German doctors, to whom I related the case, said, "You will kill the man," to which I replied with a laugh, "I will let you know if he dies." He did not, however, feel any bad effect from this somewhat early outing; on the contrary, he felt well and strong on returning home, and remained in good health all through the winter.

I gave him a few more packs to obviate any danger of a relapse, and then dismissed him as completely cured. A few years afterwards he was

on a visit to a brother in Quebec and found an opportunity of making use of his experiences in the treatment of scarlet fever by hydropathy. A severe epidemic was raging, and one of the sons of the family was attacked by it. Mr. *D.* at once put him in a pack, and though the disease appeared in its most severe shape, he saved the boy, who was about fourteen years old, by persevering with the packing treatment. As an old bachelor, however, he was rather anxious about himself, and his efforts had overstrained his nerves, a thing which invariably happens to a novice, principally on account of the feeling of responsibility. His courage, therefore, failed him, and he retired from the field, advising the parents to continue the treatment with the other children, who were already showing symptoms of infection. They were afraid to do this, and two charming girls died under the hands of the doctors. *D.* came to me to recover from the effects of his heroic action, and before his departure received a visit from his brother and nephew—in mourning. From what I learned about their illness, the girls would not have died had they been treated with wet packs in proper time. *D.* defended himself against my reproaches by saying that he had the whole family and two doctors against him and had not felt strong enough to resist them. "And if one of the children had died under my hands, what would have become of me?" he added. On my asking him whether his conscience was perfectly at ease, he shook his head, and left.

THE METHOD OF TREATING FEVER

according to Prof. Liebermeister, Tübingen.

The opinion of a man not an adherent of the Natural Method of Healing.

In the fourth congress of physicians, the above-named professor, as reported in the "Vossische Zeitung," gave his opinion at some length that the basis of the correct treatment for fever consisted in the withdrawal of heat by means of baths. His practice had convinced him that good results might be obtained and live saved by the withdrawal of heat. How this result is arrived at it is not possible to demonstrate theoretically. There is no doubt, however, that the withdrawal of heat is the principal object to be aimed at, especially in cases of severe fever.*) Brilliant results have been obtained by these means; whereas much less success has been arrived at when the principle of the withdrawal of heat has not been attended to and the chief reliance has been placed on antipyretic medicines. The reason of this is that all antipyretic remedies

***) Although Prof. *Liebermeister* is a physician, and not a natural healer, he has recognized and publicly asserted that fever should be combatted by withdrawal of heat by means of baths, etc., instead of by medicines and poisons.**

are more or less strong poisons. It is consequently dangerous to administer salicylic acid in cases were weakness of the heart exists. The same injurious effects have not been observed after the administration of quinine and antipyrine; these are, however, to be regarded as powerful poisons, and must be used with caution. Medical practice must guard against the temptation to abandon old and tried remedies in favor of new ones. No injury has resulted from overdoing baths; it *has* resulted from excess of antipyretic medicines, etc.

FEVER. REPORTS OF CASES.

Pyæmia is a dangerous fever arising from the absorption of pus by the system. We have treated several cases mainly with wet packs, rubbings and shallow baths, and always successfully.

Mr. *Haven*, Florence, had his hand caught in a sawmill, and terribly injured. He was a man in a low state of health, and with his blood in a poor condition, and as the application of water was strictly forbidden by his physician, Dr. *Walker*, of Northampton, the wound became very inflamed and began to suppurate. After a few days severe fever, accompanied by shivering fits, set in, and the patient sank so rapidly that his family determined, as a last resource, to dismiss the doctor and ask me to undertake the treatment. I at once applied lukewarm compresses to the hand, administered several lukewarm arm-baths daily, the water in the neighborhood of the hand being vigorously stirred by his son to clean the wounds, and, as the fever continued, I had the patient packed in wet sheets once or twice during the day, with the result that the fever subsided in a few days. The patient rapidly recovered under this treatment, and his hand was restored within six weeks, only a few fingers remaining stiff.

A somewhat similar case happened to my wife. She had a miscarriage in consequence of being thrown out of a sledge. All went fairly well for a few days, until she was induced to get out of bed several times during the night and attend to a sick child, the result of which was a cold. Inflammation of the veins set in in both of her legs, and this was followed by all the symptoms of pyæmia, which brought her to the verge of the grave. As a few foreign physicians happened to be staying with me, I arranged a consultation. One of them, a Swiss, advised calomel, which I refused in view of the exhausted state of the patient; another, a Spaniard, Dr. *Acosta*, of Caraccas, recommended me to apply my own method, as he had great faith in the careful treatment by cool water of cases of the nature of typhus. As my own views inclined that way, I administered first short, and afterwards longer wet packs of 75° to 77°,

and in a short time she was out of danger. The success of this treatment resulted in the saving of a second life, and probably of others. Dr. ***Acosta*** mentioned what he had seen in Florence to a mutual friend in New York, and added: "If Dr. ***Munde*** can save his wife by the application of water, I will use the same remedy with my own patients." He was sceptical concerning the recovery of my patient. When I wrote that my wife had been saved by means of wet packs, he at once went to a patient, suffering from typhus, and whose condition was supposed to be hopeless, had him packed, and thus saved him.

It is to be wished that the hospitals would adopt our method of treatment; many lives would be saved.

I once treated some boys in Freiberg for severe fever with brain complications. It was shortly after my return from Gräfenberg, at a time when the method of ***Priessnitz*** was looked on incredulously, and I was considered a cold-water fanatic. The family doctor had already given the boys up, when I offered to restore them in eight hours. The treatment was progressing satisfactorily when Dr. *H.*, who had graciously consented to my interference, took it into his head to resume his place at the helm, and ordered ice to be applied to their heads. In the course of six to eight hours the patients, in spite of the ice, were as bad as they were when I first took them in hand, and then Dr. *H.* lèft them entirely in my hands till all danger was over, when he again interfered in the treatment by giving them an aperient, greatly to their disadvantage. He could not deny, however, that my general treatment had had a better result than his treatment for the head alone. This case shows the importance of observing the rule that in brain affections local treatment is not sufficient and is often useless, and that a derivative treatment, by means of wet packs and hip-baths, is necessary.

See also "DERIVATIVE TREATMENT."

HIGH FEVER.

AN EPIDEMIC OF TYPHOID AND NERVOUS FEVER.

By Dr. KÖRNER.

The mild weather of the past winter, only occasionally interrupted by slight frosts, naturally had an unfavorable effect on the general health; I, therefore, had an opportunity of watching an epidemic of typhoid fever in two villages and on a large estate. Four persons in the village of L., thirteen in the village of E., and fifteen on the estate C., in all twenty-two men and ten women were attacked by the disease, and of these thirty-two patients I cured twenty-nine; a woman, thirty-six years of age, died, in consequence of an emetic that had been given her before my treatment,

causing a violent and intractable hemorrhage, from paralysis of the abdominal nerves; a servant on the estate died in consequence of his mother giving him a warm instead of a cold pack, resulting in an apoplectic fit; and a fisherman, aged forty-six, who was in bad pecuniary circumstances, hanged himself during convalescence.

(Owing to want of space I am unable to repeat the history and treatment of these cases as given in Dr. *K.*'s book. Those unacquainted with this disease are referred to the article on typhus.)

I will merely mention that the temperature of the patients averaged 104° to 105° and the frequency of the pulse 130 a minute.

The treatment was mainly that described in "FEVER TREATMENT, No. III."

I cannot refrain, however, from quoting Dr. *Koerner's* concluding remarks on typhoid epidemics.

What a difference between the treatment of typhus by the Natural Method of Healing and that by the administration of drugs! When the patient is tormented by burning heat, and driven nearly mad by delirious fancies, and the blessing of sleep is denied him, he will be at once calmed by a wet pack and sink into a refreshing slumber. The burning heat subsides, the pulse is moderated, respiration rendered regular, the dry tongue becomes moist, the black coating on the lips and gums, and the black discharge from the nostrils soon disappear, so that the disease, treated in this way, never reaches a dangerous point when it is taken in hand in time, and the localization of the poison not allowed to attain excessive intensity. Whereas, patients treated by drugs are worn to skeletons and crawl about like ghosts with swollen limbs and with the help of sticks during convalescence, bald-headed, hollow-eyed, and with sunken cheeks, those treated by the Natural Method of Healing recover so completely in a few weeks that they are better and stronger than before their illness. A typhoid patient, in fact, anybody attacked by severe fever, after a course of treatment by drugs, reminds me of one who has lost his way in an equatorial desert, deprived of food, tormented by the burning sun over his head, and the burning sun under his feet, till at last, in despair and exhaustion, tortured by delirium, he falls like some wild animal that has been hunted to death, or, if he just succeeds in escaping with his life, bears for a long time the traces of the desperate struggle which he has gone through; the man, on the other hand, who has been treated by our method, is like one who has reached some pleasant oasis, where rest and refreshment are at hand to welcome him, and recovers his former health and vigor, with no traces of the illness, from which he has suffered. We have, moreover, to bear in mind the safety of our treatment; the prognosis is always satisfactory if the circumstances are not too unfavorable, and all

the requisite conditions are properly fulfilled; for our treatment is based upon the laws of Nature, who never deceives us when her precepts are rightly understood and obeyed, so that we can confidently assert that every patient must recover if the circumstances are not too unfavorable. It is also a comfort to the friends of the patient that they have not to witness any shrugging of the shoulders, shaking of the head, and symptoms of confusion and perplexity on the part of the healer, nor is the latter so worried and inconvenienced as the doctor who treats his patients with drugs, and is constantly liable to be summoned, even at night. The natural healer is not troubled in this way, as the force of nature, on which he relies, takes a safe and even path to recovery, so that alterations in the treatment are seldom required.

From the above faithful description of the successful results of the Natural Method of Healing the following advantages of this method over the system of treating with drugs are evident:—

1. Many more lives are saved than under the ordinary system. Out of a hundred patients treated by our method not more than four or five, at the utmost, die, whereas out of a hundred cases treated medically at least thirty, according to Dr. *Schoenlein*, result fatally. If we apply this mode of calculation to a thousand cases, we find that three hundred and thirty of these die if treated medically, against fifty if treated in accordance with the natural method; *i. e.*, there is a difference of 28 per cent. in favor of the latter method. If we consider how much sometimes depends on the life of one man, since many may be placed in the most serious difficulties on account of his loss, it is a matter of astonishment that this method, which offers so many advantages, and which cures in the quickest, safest, and most thorough manner, has spread so little after fifty years. It would almost seem as if human life were not of much value, since people give themselves much trouble about everything else but the means of securing health and long life.

2. It leads much more quickly to recovery, for, as a rule, a patient suffering from severe illness may be considered convalescent in the fourth week. He then makes such rapid progress that in another fortnight, or three weeks, he is able to go back to his work, whereas the patient treated with drugs often crawls about like a shadow for months, and sometimes never recovers at all.

3. It cures radically and safely, purifying the blood and humors from all morbid matter, so that no secondary diseases can occur, which are constantly met with in those treated medically.

4. It is much cheaper, as it leads to recovery more quickly, thus curtailing doctor's bills and enabling us to avoid druggists' bills altogether. It can, moreover, be carried out in every cottage.

5. If the treatment be applied in time, as soon as the premonitory symptoms make their appearance, the disease is deprived of much of its severity, and takes a safe and easy course; this can easily be understood from the nature of the treatment, as its aim is to correct the faulty composition of the blood. The localization of the poison of typhus is thereby prevented, and the course of the disease curtailed.

6. The great cleanliness of the Natural Method of Healing must not be lost sight of.

7. It is quieting to the friends of the patient, and awakens their confidence. They are not rendered uneasy by signs of perplexity on the part of the healer, by shrugs of the shoulder, shaking of the head, etc., so common with ordinary doctors, or by constant prescribing of fresh medicines and consultations.

When such brilliant results are in evidence, there can be no question as to which method deserves to be called the most rational. All these results are due to a cause which is still derided, persecuted, and slandered, and the merits of which people refuse to recognize even after fifty years.

(Happily for humanity, the Natural Method of Healing is now becoming more and more recognized.—THE AUTHOR.)

In conclusion I would refer to some cases reported by Dr. *Richter* and Prof. *Mosler* showing the importance of fresh air and pure water for drinking and bathing in the treatment of fever. See also Index under "TYPHUS CURED BY AN INVOLUNTARY SNOW AND RIVER BATH."

MASSAGE.—If it be desired to add massage to the applications used in the treatment of fever, which, however, is not advisable, the following procedure may, perhaps, be adopted:—

After wet rubbing of the whole body with lukewarm water (82° to 86°), performed with bare hands, or a bath of 89° to 91°, apply massage as recommended in the strengthening treatment, but only the first kind, *viz.*, stroking.

The strokes must only be given with moderate force in high fever; with lower fevers somewhat more force may be applied. See also "MASSAGE" in Index, also "FEVER TREATMENT" under Kneipp Cure.

FEVER, HECTIC, occurs in wasting diseases, *e. g.*, in the last stages of consumption (tuberculosis) where, besides fever, violent and exhausting fits of perspiration occur, which are so much to be feared by consumptives.

It occurs, moreover, in cases of slow festering and mortification, *e. g.*, caries, ulcers, inflammation of the joints, etc.

TREATMENT.—Avoid all excitement as well as sleeping on feather beds. The patient would do best to sleep on a bed made of straw. In case

of night sweats, or dry fever, during the night, lukewarm (73° to 77°) washings of the whole body, or mild, wet rubbing of the whole body, and, if possible, hip and partial baths (86° to 98°) should be given. Avoid sexual intercourse altogether, or, at least, as far as possible. Mild regenerative treatment.

In local inflammation resulting from decay, cooling washes, soothing compresses, and in cases of fever, fever treatment. See also "PHTHISIS" and "EMACIATION." Moreover, trunk and leg packs, one or two daily, will be found beneficial.

With chronically cold feet a mild foot steam-bath, followed by cool rubbing, may be taken. Nourishing, non-stimulating diet, as given in regenerative treatment. Plenty of fresh air, both in the house and out of doors (sleep with the window open) to induce a better formation and circulation of the blood. For Modes of Application see Index. See also "FEVER" in "KNEIPP CURE."

Fever-Reducing Pack, see Index.

FIBROMA. The majority of cases of fibroma are soft swellings, sometimes appearing in small numbers, and sometimes covering the whole surface of the skin. These swellings are outgrowths of the ligamentous membranes, which have been partly displaced by the derma having a yellowish excretion resembling the white of an egg. These swellings either have a stem, or rest with the whole basis immediately upon the tissues. They grow slowly, and usually reach the size of a filbert, sometimes even that of a child's head.

TREATMENT.—Apply an invigorating treatment or, according to the general condition of the patient, even the regenerative treatment, or one of the preliminary treatments mentioned, with frequent baths and the application of local cooling, soothing, and stimulating packs. In choosing the kind of pack to be applied, consult the condition of the patient; massage of the swellings is particularly recommended. Furthermore, give steam-baths in bed (two or three a week), followed by a lukewarm bath (66°), or by a rubbing-down of the whole body with water of a temperature of 86°. Plenty of fresh air and enemata for constipation. For Modes of Application see Index. Also see "FIBROMA OF THE WOMB" and "KNEIPP CURE."

Ficus, see Index.

FILARIA MEDINENSIS. This worm grows to a length of from an inch and a half to two and a half inches. The front part is as thin as a hair, the hind part rather thicker. It is found in the coxcum or in the colon.

TREATMENT.—Non-stimulating diet, fruit, whole-meal bread, etc., as well as frequent enemata.

Finger, Cramp in the, see Index.

Finger, Gathered, see "WHITLOW."

FIRE, DANGER FROM. The ten commandments to be observed to prevent a fire, and at the time of such a disaster, are:—1. Do not be careless with fire and light. 2. Always fill and prepare your lamps in the daytime. 3. Never place wood or other inflammable stuff immediately upon, behind, or in front of the stove. 4. Use a lamp or a lantern only in lofts, in cellars, on stair-cases, and in passages. 5. Fill your spittoons only with water or sand. 6. Do not throw lighted matches or bits of cigars anywhere, except into the fire. 7. See that a sufficient supply of water is always kept in near readiness in your household. 8. Have a candle and matches by the side of your bed, and also keep your clothes ready, so as to be able to leave the house at a moment's notice. 9. Keep your keys always in one place. 10. Have a clear idea of what you should do in case of fire, and, above all, bear in mind to rouse everybody in the house, remove children and sick persons from the house, communicate with the fire brigade at once, and until its arrival make an energetic attempt to extinguish the fire yourself, secure your account-books and valuables. If the staircase can no longer be used as a means of escape, collect your people near the windows, that can be most easily got at from the street, and await the arrival of the fire brigade.

First Aid in Accidents, see "ACCIDENTS."

FISH, NUTRITIVE VALUE OF. Fish, as a means of feeding the million, where food generally is of a great variety, has not been as carefully taken into consideration as it really deserves. There are two reasons for it. In the first place, there is the erroneous idea that fish does not possess much nutritive value, and secondly, because fish of a superior quality cannot be purchased at a fair price in a good many places. As regards the first reason, the indifferent nutritive quality of fish, you may easily convince yourself that this is not so, by referring to the article given under the head of "TABLES."

These tables will show you that the nutritive value of fish must not be underrated, and that the quantity of albumen contained in fish is, at least, on an equal footing with that contained by average fat meat, and is even exceeded in the cod-fish. The idea that fish is not nutritious is absolutely erroneous and is based upon prejudice.

Also the second reason, *viz.*, that fish cannot be obtained at a fair price, cannot be considered as valid, for nowadays fish, packed in ice, is conveyed by almost every train from the seacoast to the populous centres,

so that everybody is enabled to buy good fish for little money. I trust, that these lines will serve the purpose of introducing fish into every household, a thing so desirable on account of its nutritive value and cheapness.

Fissura labii superioris, see "HARE-LIP."

Fissure, see "NIPPLE."

Fissured Palate, see "HARE-LIP."

FISTULA is a narrow duct forming the communication of a deeply located seat of inflammation and the skin or the surface of the mucous membrane, also the abnormal communication between two recesses of the body, or one recess of the body and the skin or the surface of the mucous membrane.

There are fistula of the teeth, larynx, lungs, bronchial tubes, hepatic duct, rectum, vagina, and urinal duct. As a rule, it is a matter of difficulty to cure a fistula.

The principal treatment consists of a cleansing process (frequent rinsings) as well as stimulating and, in some cases, soothing packs,—whole or three-quarter packs, bearing in mind the original cause of the disease. In case of fistula in the rectum apply steam hip-baths of fifteen to twenty minutes' duration, followed by ordinary hip-baths at a temperature of 86° and a duration of fifteen to twenty minutes. Plenty of fresh air. A general strengthening or regenerative treatment is particularly recommended. In some cases an operation is advisable. Also see under the head of "ULCERS" and the treatment of same. For Modes of Application see Index.

Fistula of the Teeth, see "DENTAL FISTULA."

FLAT IRONS HEATED WITH INCANDESCENT FUEL. The German Incandescent Fuel Company of Dresden have, in addition to their incandescent fuel spit-roaster and incandescent fuel stoves, invented a very practical patent incandescent fuel flat-iron.

Ironing with heaters or charcoal is attended with much trouble and difficulty, which is entirely obviated by the use of the flat-iron heated by incandescent fuel.

The flat-iron is heated with incandescent fuel (*Martin's* patent), no fire being necessary. The laundress is inconvenienced neither by the heat, nor by the smell, charcoal fumes, sparks, etc., which are usually such a constant source of trouble, and the work can be done uninterruptedly and in any room, without disturbing anybody in the house, and in much quicker time than with the ordinary kind, the iron maintaining an even temperature the whole time.

The incandescent fuel is supplied in the form of six-sided prismatic

blocks in boxes containing forty-eight blocks, at the price of twenty cents per box.

The patent bell-shaped incandescent fuel flat-iron, shown in Fig. 142, in indestructible black enamel, costs only Mk. 3.50; the pattern named "Mein Ideal," elegantly finished in polished nickel, with protecting plate and polished handle, Mk. 6.

The iron on lighting the incandescent fuel.

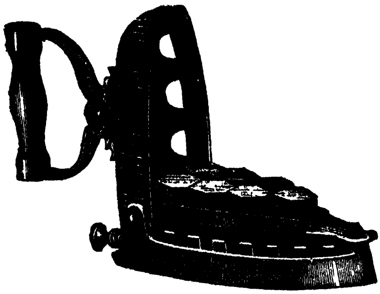


Fig. 140.

The iron after lighting the incandescent fuel.

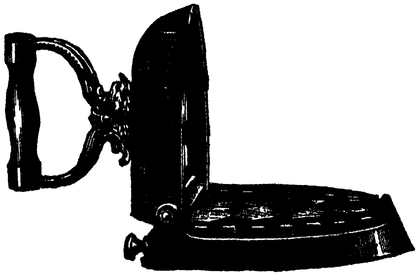


Fig. 141.

Nothing else is required for using these irons.

Should wet or starched linen have to be ironed, it is advisable to use two irons, whereby the work is greatly accelerated.

Incandescent fuel flat iron ready for use.



Fig. 142.

Firing Grate.

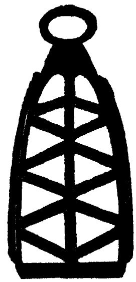


Fig. 143.

The incandescent fuel may be used in other hollow irons, but not so advantageously and economically as in the patent incandescent fuel flat-irons. Being, at the same time, useful and elegant utensils, one or two should be procured by every family valuing health and comfort on the one hand, and economy and cleanliness on the other.

Directions for Use.

The three foregoing diagrams show the patent incandescent fuel flat-iron, on lighting the fuel (Fig. 140), after lighting the fuel (Fig. 141), and ready for use (Fig. 142).

The only object of Fig. 140 is to show the process necessary when there is no fire in a stove or hearth serviceable for igniting the fuel. In such a case the firing grate, supplied gratis with every iron, is placed on the underpart of the iron, in the manner shown in Fig. 137; seven blocks of the fuel are now placed on the firing grate and exposed to the flame of from two to three tablespoonfuls of spirits of wine previously poured into the bottom of the flat-iron. The spirit is allowed to burn out, and after an interval of a few minutes the firing grate is removed with a pair of tongs, and the ignited blocks of fuel allowed to fall to the bottom of the iron. In the absence of a stand for the flat-iron the firing grate may be used for this purpose.

The seven blocks are ignited either over the flame of spirits of wine, as described above, or in the flame of an ordinary coal fire, and so arranged in the iron that a single block is placed at the point, and three pairs behind it (Fig. 138). Care should be taken to place the blocks with the hottest sides downwards, the hottest block of all being kept in front.

The flat-iron is allowed to remain open for a few minutes, and the cover is then let down and pushed forward as far as possible, the bolt behind being fastened. Should the front block be in the way, it must be pushed back a little. The blocks will not require to be re-ignited during the day; in case of prolonged use, a few unignited blocks should be placed every hour among the ignited ones after the ashes have been shaken out. The ashes should be removed every hour by inclining the firmly closed iron to each side alternately, and vigorously shaking it.

Incandescent box iron.



Fig. 144.

Should the iron be used only for a short time, the blocks, that are not yet burnt out, may be placed inside a tin box with a lid, and made use of later.

Linen can be glazed with the rounded hinder part; tapes and ribbon can be ironed out with the front part of the iron.

When the irons are used for the first time, the particles of grease, with which they have been rubbed, will melt; the smell arising in consequence will be entirely absent when the irons are used again.

The cost of ironing with this iron and with the use of the incandescent fuel (*Martin's* patent) amounts to from 1 to 2 cents an hour.

The flat-iron with polished surface and rounded off for glazed work, specially adapted for ironing tucks, folds in sleeves, etc., weighs about 3½ pounds. Price, 25 cents.

Incandescent box iron for tailors (Fig. 144), from 16 to 22 pounds in weight, costs from two to three dollars, but it is questionable whether it will meet all requirements.

FLATULENCE (Accumulation of Gases in the Intestines Or, Outside the Same, in the Peritoneal Sac) occurs frequently co-ordinately with the most manifold diseases of the abdomen, and very often indicates a fatal termination. As a rule, however, it is merely a simple, independent sign of an acute or chronic disorder of the stomach, and has its origin in wind-causing food and drink, as sauerkraut, cabbage, leavened cake, cereals, new wine, beer, etc., or in the decomposition of excrement in the intestines, or in forcible or artifical retention of wind, resulting from muscular weakness or nervousness.

It may be temporary or lasting, and pass off without further consequences, or it may cause at once very violent symptoms, pains as in colic, palpitation of the heart, fright, fainting, cold perspiration, suffocation, etc.

Sedentary mode of life, want of bodily exercise, indulging freely in coffee and meat, and imperfect mastication may also be considered as belonging to the principal causes. Hysterical women and girls suffer from it most frequently, and the gastric vapors, which have collected in the abdomen, produce constantly a distinctly audible and—by no means pleasant—rumbling noise.

The causes external to the intestines are, perforation of the peritoneum, injury, ulcers in the stomach and intestines.

Treatment of Temporary Flatulence.—Remove the cause. A half steam-bath of half an hour's duration, followed by a bath of 88°, with affusion of the abdomen, enemata, hip-baths (77° to 81°) for from ten to fifteen minutes, rubbing and kneading of the abdomen with due precaution (see "Massage of the Stomach"), stimulating abdominal compress which may be changed after from two to four hours. In cases of chill a warm rubbing of the abdomen, or steam compresses, or hot-water bottles on the abdomen may be recommended. A hip-bath of 95° for five minutes, alternated with one of 65° for one minute, three times in succession, is of most beneficial effect, as are also alternate showers on the abdomen.

Curative gymnastics, besides various trunk movements, bending and swinging vibrations of the pit of the stomach should be applied. By this means more rapid evacuation (better digestion) is ensured, and therewith prevention of the formation of gases. Vibration of the abdomen is not in place here, as it has a relaxing effect on the abdominal muscles. In addition to the above, passive and resistance movements are, if possible, to be performed by an attendant.

In lingering ailments plenty of exercise, fresh air, and avoidance of the above-mentioned food, as well as non-stimulating diet, are prescribed in addition.

A cup of fennel or aniseed tea, or a mixture of the two, may be recommended as a harmless internal means. Infants must, in the first place, be properly nourished; the mother's or the cow's milk must be wholesome. Food that is difficult of digestion must be avoided, and babies should not be exposed to draughts while being bathed, and the napkins changed as soon as necessary.

In severe cases even regenerative treatment should be applied. For Modes of Application see Index.

FLESH, LOSS OF, may come on rapidly or gradually. The course is rapid in all acute forms of disordered digestion, which are of several weeks' duration, *e. g.*, dysentery, gastric fever, in fact, with all feverish ailments of long continuance. It is gradual particularly in connection with consumption and, in general, in diseases which develop slowly.

Loss of flesh may also be caused by trouble, anxiety, mental exertion, etc.

TREATMENT.—Remove the cause, and treat the particular disease.

Flux During Childbed, see "WOMEN, DISEASES OF."

Fœnum Græcum, see "HERBS, MEDICINAL."

FOOD, ANALYSIS OF.

TABLES SHOWING THE CONSTITUENT PARTS OF VARIOUS FOODS.

A.—*Animal Food.*

Name of food.	Water %	Albumen %	Fat %	Name of food.	Water %	Albumen %	Fat %
Beaf, lean	75.9	21.9	0.9	Pork, (ribs)	44.4	9.7	45.5
do. moderately fat.	72.0	17.5	10.0	Tongue, smoked	35.7	24.8	31.6
do. very fat	54.8	16.9	27.2	Ham, smoked	27.9	23.9	36.4
Veal	72.8	18.9	7.4	Black pudding	49.9	11.8	11.4
Calf's liver	56.0	34.9	3.2	Liver sausage	48.7	15.9	26.8
Mutton, moderately fat	72.9	14.5	9.0	Pickled do.	41.5	23.1	22.8
Mutton, lean	73.6	20.8	2.8	Smoked do.	58.6	22.8	11.4
do. very fat	54.0	11.7	33.6	Brain do.	37.4	17.6	39.7
Pork, lean	72.5	19.8	6.7	Old hen	77.8	17.5	1.4
do. moderately fat.	60.0	12.8	26.2	Young cock	70.0	23.8	3.1
do. very fat	43.[illegible]	23.[illegible]	42.[illegible]	Pigeon	76.0	18.5	1.0

Animal Food.—(Continued.)

Name of food	% Water	% Albumen	% Fat	% Extract
Herring, salted...	47.1	18.9	16.6	2.5
do. smoked.	69.5	21.1	8.5	—
Carp	78.8	18.1	1.0	—
Dried cod	18.6	77.9	0.8	—
Smoked bacon (German)	10.7	2.6	77.8	—
Smoked (American) salted....	9.1	6.7	75.7	—
Pig's lard, American	8.8	0.2	90.0	—
Pig's lard, German	0.7	0.2	99.0	—

Name of food	% Water	% Albumen	% Fat	% Extract
Beef, German....	1.3	0.4	98.2	—
Eggs	74.7	13.1	10.4	—
Cream	63.1	5.1	29.0	2.4
Milk	87.5	4.0	3.5	4.5
Skimmed milk ..	—	3.3	0.4	4.8
Butter	10.0	—	85.0	—
Curdled milk ...	90.4	3.7	0.3	4.8
Buttermilk	90.3	3.4	1.0	5.0
Cheese, German..	40.0	43.0	7.0	—
do. cream...	39.0	32.9	25.0	—
do. Swiss....	36.0	24.7	32.0	4.5

B.—*Tinned and Potted Meat, etc.*

Name of food	% Water	% Albumen	% Fat	% Carbo-hydrates
Press'd corn'd beef	56.9	33.3	6.4	—
Austral. tinn'd meat	54.0	29.3	12.1	—
Pease pudding	5.36	19.60	34.59	29.75
Rumford soup	11.73	16.18	1.87	56.88
Pea soup.....	11.41	21.0	3.05	53.17
Pea soup with meat extr'ct	9.87	16.27	17.07	44.28
Condens'd Pea soup	7.25	18.8	20.0	41.9

Name of food	% Water	% Albumen	% Fat	% Carbo-hydrates
Condensed Gruel	8.70	7.60	11.06	63.5
Soup powder..	10.83	8.72	11.85	55.05
Oatmeal porridge	9.81	9.8	5.2	70.5
Patent meat- & vegetable lozenge	8.0	31.0	20.0	33.0
Patent meat-powder	5.0	73.0	—	7.0

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*) Carbo-hydrates are fatty substances, such as starch, sugar, vegetables, gelatine, gum, sugar of milk, honey, lactic acid, alcohol, etc.; albuminous substances are: albumen, fibrine, caseine, gelatine, gluten, etc.

C.—*Vegetable Foods.*

Name of food	Water %	Albumen %	Fat %	Carbo-hydrates %
Wheatmeal, fine	14.8	8.9	1.1	74.1
Wheatmeal, coarse	13.6	12.0	1.1	72.8
Rye meal	14.0	11.0	1.6	71.9
Barley	12.8	7.2	1.1	76.1
Groats	14.0	11.3	1.1	70.0
Grain	10.4	15.5	6.1	63.6
Beans, white	14.5	24.5	—	55.5
Lentils	12.5	24.8	1.8	54.7
Pea flour	8.1	28.1	2.9	50.1
Bean flour	13.48	26.56	1.55	55.13
Maize	10.60	14.0	3.80	70.68
Beet-sugar	2.9	—	—	95.5
Potatoes	75.0	2.0	0.3	20.7
Wheat cakes, fine	38.5	6.8	0.7	52.8
Wheat biscuits	8.0	15.6	1.0	73.4
Rye biscuits	11.6	8.7	0.9	78.6
Rye bread	44.0	6.0	0.5	47.8
"Kommis" bread	45.0	6.2	1.4	46.8
Enlg. biscuits	7.4	7.1	9.8	75.1
German biscuits	10.0	11.9	7.4	68.6
Gingerbread	7.2	3.9	3.5	83.1
Apples, fresh	83.0	0.4	—	13.8
do. dried	17.5	1.8	—	66.9
Pears, fresh	83.[illegible]	0.[illegible]	—	11.4

Name of food	Water %	Albumen %	Fat %	Carbo-hydrates %
Wheat cakes, coarse	43.2	4.1	0.6	51.1
Starch flour	14.8	1.4	—	83.2
Vermicelli	13.6	9.0	0.8	76.8
Rice	11.5	6.7	0.5	77.0
Millet	11.2	11.8	3.5	67.2
Peas, dried	14.8	22.5	2.5	58.1
do. peeled	12.7	21.1	0.8	60.9
Plums, fresh	84.8	0.4	—	7.5
do. dried	—	3.8	0.9	45.0
Sauerkraut	—	1.0	0.2	4.8
Carrots	85.9	1.8	0.2	9.8
Radishes	86.9	1.9	0.1	7.9
Turnips	92.1	1.2	0.1	6.8
Celery	84.0	1.5	0.4	11.8
Cabbage turnip	86.7	2.7	0.2	8.6
Cucumber	95.6	1.0	0.1	2.2
Pears, dried	10.7	1.2	—	64.9
Asparagus	93.3	1.9	0.2	2.7
Green peas	80.0	6.1	0.4	12.4
French beans	91.0	2.0	0.2	5.7
Cauliflower	90.1	2.8	0.9	5.8
White cabbage	89.9	1.9	0.2	6.6
Red cabbage	90.0	1.8	0.2	7.1
Lettuce	94.8	1.4	0.8	2.2
Spinach	91.7	2.0	0.8	6.0
Dried mushrooms	17.5	23.8	1.2	50.8
Mustard	5.4	28.[illegible]	35.[illegible]	25.[illegible]

I add an extract from the statistical tables in ***Theodor Hahn's*** book, "The Paradise of Health."

Remarks by Dr. Dock.—The most important constituents of our food are:—a) the nitrogenous, *i. e.*, the albuminous; b) the non-nitrogenous, including the fats and carbo-hydrates; c) the mineral substances (salts); d) water. The nitrogenous substances play a highly important part in our nourishment, for they are principally concerned in the formation of

the blood, as well as of the tissues and organs of the body. (The leguminosæ are the articles of diet richest in albumen.) The fats in our food are either stored up in the body as such, or are oxidized, *i. e.*, burnt up or converted into carbonic acid and water by the oxygen in the blood.—The carbo-hydrates, largely represented in the various kinds of grain and leguminosæ, supply the combustible material, the oxidation of which is

Name of food	% Water	% Nitrogenous Substances	% Alcohol	% Sugar	% Extract	% Residue
Lager beer	90.71	0.49	3.68	0.87	5.61	0.22
Export beer	88.72	0.71	4.07	0.90	7.22	0.27
Ale and porter	88.52	0.73	5.16	0.88	6.32	0.27
French red wine	88.44	—	9.07	0.19	2.49	0.28
Rhine wine (white)	86.26	—	11.45	0.87	2.29	0.17
Champagne	77.61	—	11.95	—	10.44	—
Brandy	55.0	—	45.0	—	—	—

the source of the heat and force manifested within the body, and, to some extent, supply the want of albumen and fat.

The varieties of grain, wheat, rice, etc., principally contain carbo-hydrates, in addition to a large quantity of albumen, as the preceding tables show, whereas meat, though rich in albumen, is remarkably deficient in carbo-hydrates. The consumption of nitrogen is unaffected by the work of the muscles, for the need of albumen remains the same in work and repose (***Fick*** and ***Wislicenus***); an excessive nitrogenous diet is, therefore, unnecessary and sometimes injurious to the system on account of its great liability to decomposition.—A great amount of mechanical work can be performed on a vegetable diet deficient in nitrogenous materials (***Traube***). Animal and vegetable albumen have the same chemical composition and nutritive value. No article of food is able by itself to represent a definite nutritive value; all foods acquire this value by a suitable combination with other foods; for this reason it is important to combine the less nourishing articles of food with others possessing a greater amount of nutriment. The indigestible cellular substance plays an important physiological part (improved action of the bowels), consequently Graham's bread and fruit are to be highly recommended. Fruit

Description of Food.	Water %	Albumen (nitrogenous materials) %	Carbonates %	Fat %	Salt %	Raw fibre %
Barley	10—15	15—27	70—75	2—3	$2._5$—$5._5$	8
Oats	12—13	11—18	60—70	6—7	3—4	$5._5$—7
Wheaten bread (white)	35—40	10—$12._9$	40—50	1—$2._5$	1—$1._2$	1—1.
Graham's bread	30—35	$10._5$—$12._5$	40—45	$1._5$—$3._5$	$1._5$—2	$3._5$—6
Almonds	$3._5$	25	$9._5$	$5._5$	$2._5$	4—5
Eggs	50—70	$13._7$—$15._7$	$25._5$	$8._5$—$12._5$	1—$1._5$	—
White of eggs	82—88	$12._5$	$0._5$	—	$0._{65}$	—
Yolk " "	$51._5$	$15._5$	26—$26._5$	$8._5$—$12._5$	$1._5$	—
Cow's milk, fresh	81—90	$2._8$—$4._5$	$3._2$—$4._5$	$18._2$—$9._8$	$0._5$—$6._7$	—
" " skimmed	90	$3._1$	$5._3$	$0._2$	$6._8$	—
Condensed milk	$21._5$	$10._2$	$52._9$	$12._9$	$2._5$	—
Whey	$94._5$	$0._5$	4	$0._5$	$0._4$	—
Woman's milk (first week)	84	$3._2$	$6._5$	$5._7$	$0._3$	—
" " (second week)	87	$3._5$	$4._2$	4	$0._{28}$	—
Goat's milk	$83._5$—89	$2._5$—$5._5$	3—$5._5$	4—$5._5$	$0._5$—$0._7$	—
Sheep's milk	82—85	$4._5$—$6._5$	$3._5$—5	$4._6$	$0._6$—1	—
Asses' milk	90	$1._6$—2	6	$1._2$	$6._5$	—
Cocoa	$6._5$—11	20	8—10	37—55	$3._4$	10—30
Coffee	12	$14._5$	$18._5$	12—13	$6._5$—7	$36._5$
Tea	15—$16._5$	5	$27._5$—28	2	6	$42._5$
Potatoes	70—77	$1._5$—$2._5$	16—$23._5$	$0._3$	$0._9$—1	1
Apples	82—83	$0._{49}$	$13._5$	—	$0._{25}$—$0._{35}$	$1._{70}$—3

Description of Food.	Water %	Albumen (nitrogenous material) %	Carbonates %	Fat %	Salt %	Raw fibre %
Pears	83.5—84	0.15—0.25	11.5	—	0.30—0.35	2.20—4.5
Egg plums	81.5—83.10	0.25—0.90	10—12.5	—	0.50—0.80	0.60—1.60
Plums	71—87	0.30—0.45	6.70—7.5	—	0.25—0.50	0.80—1.50
Plums (dried	—	3.3	45	0.9	1.25—2.50	4—7.50
Cherries	75—82	0.95—1.10	13.1—18.1	—	0.45—0.90	0.75
Grapes	79	0.75	10.5—19	—	0.35	4.5
Strawberries	87—87.5	0.35—0.6	4—8.5	—	0.45—0.75	4.5—6
Gooseberries	81—86.5	0.85	10	—	0.25—0.3	8—8.5
Currants	84.50	0.55	9.55	—	0.75	4.50
Bilberries	77.50	0.80	8.10	—	1.40	12.30
Raspberries	83.5—88	0.55—0.65	7—8.2	—	0.1—0.3	4.5—8.5
Mulberries	84.70	0.4	13.35	—	0.65	0.85
Peaches	75	0.17—0.3	19—25.5	—	0.1—0.5	0.5—1.5
Apricots	83.5	0.9	18.5	—	0.85	1.10
Figs, dried	16	0.5	67.5—68	0.9	0.5	15
Dates	24—30	0.5—1.5	67—71	0.3	0.6	1.5—2.5

and vegetables are highly healthy, refreshing, and blood-forming articles of diet. Fruit cannot be too strongly recommended, especially to children and invalids.

According to Dr. *Meinert,* a healthy laboring man engaged in light occupation (*e. g.*, a carpenter, glazier, turner, shoe-maker, mason, weaver, brick-moulder, hatter, clerk, letter-carrier, house-porter, etc.) requires for his daily food on an average 100 grammes of digestible albumen, 50 grammes of fat, and 450 to 500 grammes of carbo-hydrates. A man engaged in arduous labor, on the other hand, such as a man employed in an iron foundry, metal factory or work-shop, smithy, stone-quarry, mine, etc., or who has to carry heavy weights, requires for his complete nourishment 100 grammes of digestible albumen, 70 to 100 grammes of fat, and 450 to 500 grammes of carbo-hydrates. Fifty grammes is the minimum quantity of fat, in the opinion of the most competent authorities, which should be contained in our daily food.

According to Dr. *Schmitz,* a grown-up man, engaged in physical labor, requires daily:—120 grammes of albumen, 56 grammes of fat, 500 grammes of carbo-hydrates, and 2,500 grammes of water. A woman requires 96 grammes of albumen, 48 grammes of fat, and 400 grammes of carbo-hydrates; a child, between the ages of seven and fifteen, 76 grammes of albumen, 44 grammes of fat, and 320 grammes of carbo-hydrates; and a child of one year and a half, 30 grammes of albumen, 42 grammes of fat, and 70 grammes of carbo-hydrates.

A number of experiments made by leading scientific men, particularly by Prof. *v. Voit* of Munich, who has done as much for the science of dietetics as *Justus v. Liebig* for chemistry, have conclusively proven that a man of medium size, engaged in moderately arduous work, daily requires for the adequate nourishment of his body 2,818 grammes of water, 118 grammes of albumen (100 grammes of digestible albumen [for which gelatine can be partially substituted, according to Dr. *Hopf*]), 56 grammes of fat, 500 grammes of carbo-hydrates, 32 grammes of salts and 744 grammes of oxygen in the air breathed by him. A man cannot live and work either on albumen alone, or on starch and fat alone. A diet is required in which each of these substances is present in the proper proportion.

TABLE

Showing the Time Required to Digest Various Articles of Food, According to Dr. Beaumont's Experiments.

Name of food	Time required for digestion	
	Hours	Min.
Rice, boiled	1	—
Pigs' trotters	1	—
Tripe	1	—
Eggs, raw, beaten	1	30
Trout, fresh, boiled	1	30
Barley broth	1	30
Groats	1	30
Apples, ripe, raw	1	30
Game, roast	1	35
Brain, boiled	1	35
Sago "	1	45
Tapioca, boiled	2	—
Barley "	2	—
Milk "	2	—
Liver (calf's)	2	—
Eggs, raw, fresh	2	—
Dried cod, boiled	2	—
Apples, sour, ripe and raw	2	—
Pickled cabbage, raw	2	—
Milk, hot boiled	2	—
Eggs, fresh, fried	2	15
Turkey, wild, roast	2	18
" tame, boiled	2	25
Gelatine, boiled	2	30
Turkey, tame, roast	2	30
Goose, wild, roast	2	30
Sucking pig "	2	30
Lamb, fresh "	2	30
Hare, warmed up, with vegetables	2	30
Beans, green, boiled	2	30
Sponge cake, baked	2	30
Parsnips, boiled	2	30
Potatoes, fried	2	30
Cabbage	2	30
Marrow, boiled	2	40
Chicken, fricasseed	2	45
Eggs and milk pudding	2	45
Beef, boiled	2	45
Apples, sour, hard, raw	2	50
Oysters, fresh, raw	2	55
Eggs, fresh, softly-boiled	3	—
Perch, fried	3	—
Beef, lean, underdone	3	—
Beefsteak, fried	3	—
Pork, fresh, salted, raw	3	—
Mutton, roast	3	—
Pork, fresh, salted, steamed	3	—
Mutton, boiled	3	—
Chicken broth	3	—
Bean soup	3	—
Apple dumpling, boiled	3	—
Indian corn cake, baked	3	—
Pork chops, fried	3	—
Oysters, fried	3	15
Pork, fresh, salted, roast	3	15
Mutton, fresh, salted	3	15
Indian corn bread, baked	3	15
Carrots, boiled	3	15
Sausage, fried	3	20
Butter, fresh, melted	3	30
Oyster soup	3	30
Beef, fresh, lean, roast	3	30
" boiled with mustard	3	30
Butter, clarified	3	30
Cheese, old, strong, raw	3	30
Mutton-broth	3	30
Bread, wheaten, new	3	30
Turnips, boiled	3	30
Potatoes "	3	30
Eggs, fresh, hard-boiled	3	30

Name of food	Time required for digestion		Name of food	Time required for digestion	
	Hours	Min.		Hours	Min.
Indian corn, boiled with beans	3	45	Pork, fresh, salted stewed	4	15
Beet-root, boiled	3	45	Marraw bone soup	4	15
Salted Salmon, boiled	4	—	Gristle, boiled	4	15
Beef, salted, stewed	4	—	Pork, fresh, salted, boiled	4	30
Veal, fresh, roast	4	—	Veal, fresh, stewed	4	30
Chicken, roast or boiled	4	—	Duck, wild, roast	4	30
Ducks, tame, roast	4	—	Mutton suet, boiled	4	30
Beef soup, boiled with vegetables	4	—	Cabbbage "	4	30
Hart, stewed	4	—	Pork, fat and lean, roast	5	15
Beef, old, hard, salted and boiled	4	15	Sinews, boiled	5	30
			Beef suet, fresh boiled	5	30

In order to digest easily and well, all food, as we have often remarked, must be thoroughly and slowly masticated. Plenty of time should, therefore, be allowed for eating. The shorter the time that we allow for our eating, the longer the time that we shall be obliged to spend in being ill.

Table Showing the Consumption of Wine, Spirits, Beer, Tobacco, Coffee, etc., by Various Nations.

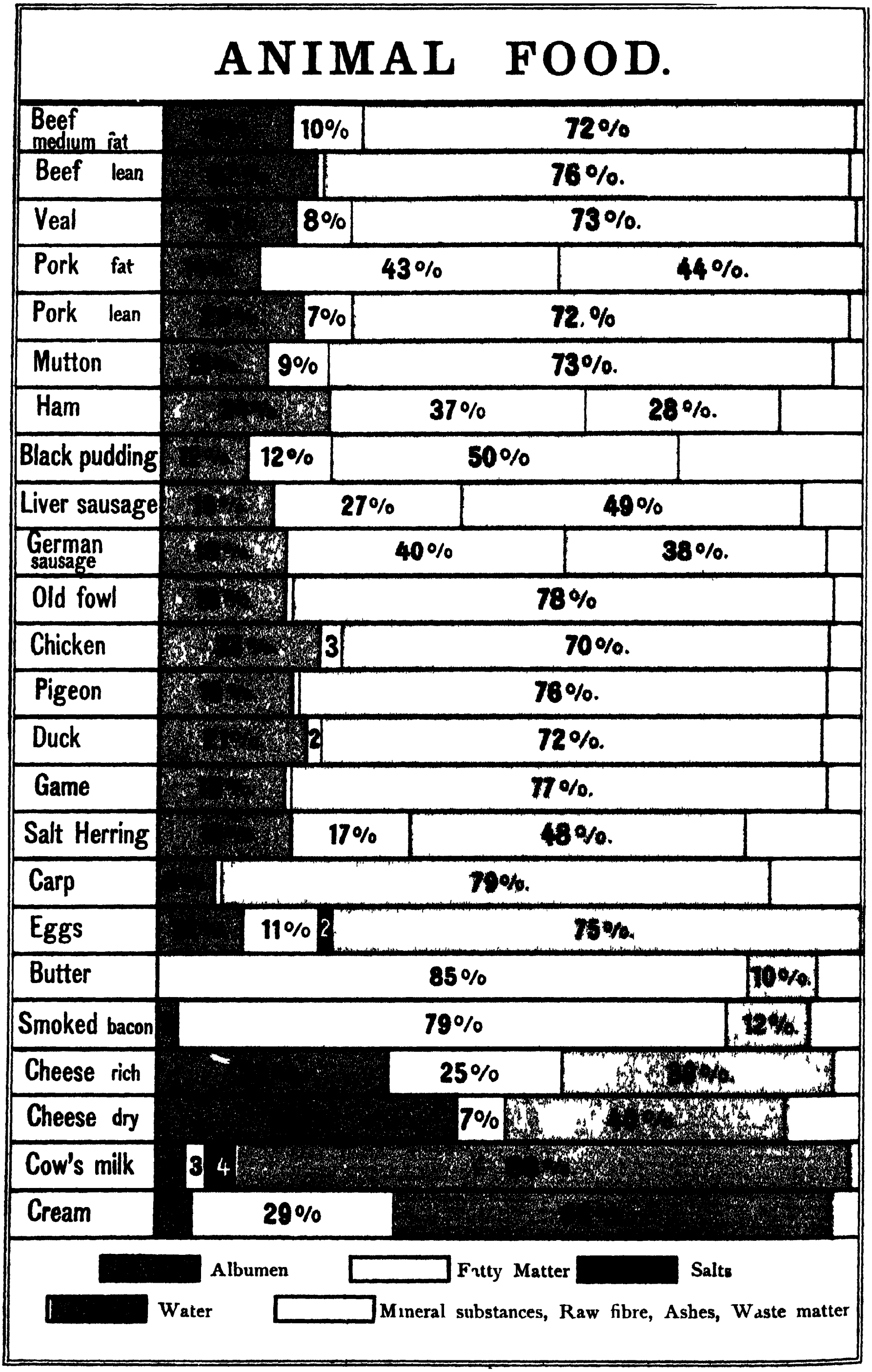
According to *Haushofer's* Handbook of Statistics (Vienna, *Braumuller*, 1872) consumed annually per head.

Wine.

In Spain	130	Litres	In Great Britain	8	Litres
" France	115	"	" Belgium	7	"
" Italy	109	"	" Holland	6	"
" Portugal	108	"	" Prussia	4	"
" Greece	84	"	" Russia	4	"
" Austria	65	"	" Denmark	3	"
" Switzerland	58	"	" Saxony	2	"
" Baden	46	"	" Sweden	2	"
" Wurtemberg	26	"	" Norway	$1._5$	"
" Bavaria	12	"			

Spirits.

In Russia	$25._2$	Litres	In Austria	$6._5$	Litres
" Prussia	$13._6$	"	" Great Britain	$5._3$	"
" Sweden	$12._3$	"	" France	$2._2$	"
" Saxony	$7._5$	"	" Italy	$0._2$	"


ANIMAL FOOD.
Beef medium fat 10% 72%
Beef lean 76%.
Veal 8% 73%.
Pork fat 43% 44%.
Pork lean 7% 72.%
Mutton 9% 73%.
Ham 37% 28%.
Black pudding 12% 50%
Liver sausage 27% 49%
German sausage 40% 38%.
Old fowl 78%
Chicken 3 70%.
Pigeon 78%.
Duck 2 72%.
Game 77%.
Salt Herring 17% 48%.
Carp 79%.
Eggs 11% 2 75%.
Butter 85% 10%.
Smoked bacon 79% 12%.
Cheese rich 25%
Cheese dry 7%
Cow's milk 3 4
Cream 29%
Albumen
Fatty Matter
Salts
Water
Mineral substances, Raw fibre, Ashes, Waste matter

Beer.

In Bavaria	134 Litres		In Switzerland	20 Litres	
" Great Britain	113	"	" Prussia	19	"
" Belgium	80	"	" France	15	"
" Brunswick	68	"	" Sweden	$11._5$	"
" Saxony	37	"	" Spain	2	"
" Baden	31	"	" Russia	$1._8$	"
" Holland	29	"	" Italy	1	"
" Austria	22	"			

Tobacco, Smoked, Chewed, or Taken as Snuff, per Head:

In Saxony	1550 Grams*		In Norway	830 Grams	
" Baden	1550	"	" France	790	"
" Prussia	1400	"	" Greece	780	"
" Belgium	1300	"	" Bavaria	760	"
" Holland	1250	"	" Wurtemberg	720	"
" Denmark	1100	"	" Italy	700	"
" Switzerland	1050	"	" Portugal	640	"
" Austria	950	"	" Great Britain	620	"
" Turkey	850	"	" Sweden	550	"
" Spain	840	"	" Russia	310	"

Coffee Drunk Yearly, per Head:

In Holland	6000 Grams		In Germany	2000 Grams	
" Belgium	4600	"	" England	950	"
" North America	4550	"	" France	800	"
" Switzerland	3000	"	" Austria	650	"

The coffee plantations in different parts of the world are said to produce altogether about half a million tons, about half of which comes from Brazil. The quantity of tea cultivated and drunk is far greater. The principal consumers of tea are the Chinese, North Americans, Russians, English and Dutch, but Germany, according to ***Klenke***, drinks two million pounds of this expensive article, which is useless and even injurious to the health and well-being of the nation.

Dr. ***v. Bibra*** ("Narcotics and Man," ***W. Schmidt***, Nuremberg) calculates that coffee is drunk by more than a hundred million people, that the same number are betel-nut chewers, that chicory is drunk by forty millions, cocoa by fifty millions, Mate or Paraguay tea by ten millions, and coca by the same number; that three hundred millions eat or smoke Haschish (Indian hemp), that four hundred millions eat or smoke opium, and that Chinese tea is drunk by five hundred millions. Moreover, tobacco is smoked, chewed, or taken in the form of snuff by hundreds of millions, and alcohol consumed in various forms by as many persons.

*) 28½ grams = 1 ounce.

Food, see "DIET, MIXED," "DIET, NON-STIMULATING," and "INVALID'S DIET."

FOOD, AVERSION TO, is produced either by the smell or taste attaching to some viands and beverages, or by an instinctive feeling that certain comestibles are injurious. It appears frequently in consequence of indigestion or of immoderate indulgence in food, but may be the cause of a morbid nature, and proceeds mostly from the stomach or the pulmonary nerve (vagus).

If the attempt be made to violently overcome this aversion, sickness and vomiting is the consequence.

TREATMENT.—First of all avoid all such food. If aversion is the result of a morbid nature, or should, perhaps, faulty digestion be the cause, a very moderate, easily digestible diet is recommended. Attention must also be paid to cutaneous action (by daily wet rubbing of the whole body or bath), and plenty of fresh air is essential. In many cases, however, this feeling of aversion is only fancy, habit, and exaggeration, and in most cases disappears when the person troubled with it is forced by circumstances to live on poor, meagre fare.

Food, Cooking of, see "DIET, MIXED."

Food for Invalids, see "DIET, NON-STIMULATING," also "INVALID'S DIET," also "DIET, MIXED," and Index.

Food, Preparation of, see "DIET, MIXED."

Food, Time Required to Digest Various, see "FOOD, ANALYSIS OF."

Foot Bath, see Index.

FOOT, CURE OF DISEASED. Last August my father, a mason of Frankfort on the Oder, had an accident, in consequence of which his right foot was so badly injured that he had to be carried home.

The physician, who attended him, used various means for nearly four months without success, and at last declared that in view of the advanced age of the patient (my father was sixty-four years old) the foot could not be healed.

As the worthy doctor had declared himself at the end of his resources, and had confessed the impotence of medical science, recourse was next had to non-scientific means, to household remedies. These, however, were equally fruitless. After another four months the patient was still in the same state; the foot was swollen, very painful, and could not be used. I now had my father removed to Berlin, and took him to Mr. *Canitz*, in order to see whether the Natural Method of Healing could effect a cure.

Mr. *Canitz* undertook the treatment, ordered regular foot steam-baths, wet rubbing of the whole body, leg-packs, kneading of the injured foot, and non-stimulating diet. We followed the directions scrupulously, and could see the gradual improvement in the patient's condition. The foot was healed in fourteen days, the swelling and pain had entirely subsided, and a slight sensation, as if the foot had "gone to sleep," was all that remained of the injury, which had been treated scientifically and unscientifically for eight months.

Not the advanced age of the patient, but the whole system of medical treatment was, therefore, at fault, otherwise the foot could not have been healed in a fortnight. If we had had recourse to a natural and rational treatment at first, my father would have been spared eight months of suffering and a considerable pecuniary outlay.

Berlin. *Theodor Ritter,* Jurstenberger Street 11.

Foot, Open Sore on the, see Index.

Foot Pack, see Index.

Foot Steam-Bath, see Index.

Foot Steam-Bath in Bed, see Index.

FOOT-WARMER. This is not to be confused with the well-known foot-stool containing a hot-water bottle, but it is an apparatus heated by incandescent fuel (*Mqxtiv*[illegible] little attention and costs very little.



Fig. 145.

For people who suffer from cold feet, in offices and rooms the floors of which are cold, for anæmic or elderly people, for travelling, etc., etc., this apparatus is a real boon.

For warming carriages, sleighs, etc., see "FOOT-WARMER FOR CARRIAGES."

Directions for use are given with each.

FOOT-WARMERS FOR CARRIAGES. The heating of carriages, sleighs, etc., is a subject much neglected in Germany, although it is a necessity to protect oneself, especially one's feet and eyes, from cold in driving.

The German Incandescent Fuel Co. in Dresden has made it its special task to produce a means of heating carriages, meeting all hygienic and practical requirements, and to bring it within the reach of all by cheapness of production and working.

For closed carriages we recommend the use of an apparatus furnished with air conducts for ventilation, as then all vitiation of the air is impos-

sible, even with closed doors and windows. The trifling inconvenience of having to connect the apparatus with the open air, by having two small openings made in the bottom of the carriage, before the apparatus can be utilized, is scarcely worth considering, compared with the lasting hygienic advantages of this system. In the summer, when the apparatus is taken out, the above-mentioned openings are covered up with tin covers,



Fig. 146.

which are supplied free of charge. For short drives in carriages, which are not quite closed, the apparatus shown in Figure 146 may be used, and these are only placed in the carriage.

In open or half-covered vehicles and sleighs the apparatus shown in Figure 147 is exclusively used, and these do not act like hot-water bottles, as one would suppose, but supply a constant current of warm air to the [illegible] of the body, while wrapped in rugs. Heavy furs

Carriage warmer.



Fig. 147.

and the like are by this means rendered superfluous even in the severest cold, and driving in the winter in an open trap becomes a source of pleasant recreation and healthy enjoyment.

These carriage foot-warmers take up but little space, are strongly made and nicely finished; they yield equable warmth for ten or twelve hours without requiring any attention, and cause no unpleasantness either by reason of smelling or otherwise. The warmth is felt below more than above, as the greatest comfort is thus experienced and the best protection against chill is provided by keeping the feet warm and the head cool. The heat is derived solely from incandescent heaters, *Martin's* patent, which

act without smoke or smell. The cost is less than a cent per hour, and the company guarantees absolute perfection in working.

The warmth is equable from first to last, and is conducted to the body in an equable manner by the carpet covering. Price, from 3 to 4½ dollars. Length, twenty inches; breadth, eight inches; height, about four inches. To be had of the Deutsche Glühstoffgesellschaft, Dresden, Germany.

Foot, Wet Rubbing of the, see Index.

FORCED FEEDING. On this subject two articles will be found, the first describing Dr. *Walser's* treatment, the other that of Dr. *Ebing.*

Dr. *Walser's* treatment from the "Handbook for Natural Hygiene."

This treatment is adopted in cases of prostration of the activity of the nerves, and when the patient has been brought very low by nervous disorders, insomnia, pain, cramp attacks, loss of appetite, and weak digestion. The fattening should not, however, consist in letting the patient lie for weeks in bed, and there eat and drink, but in bringing him into such surroundings that the various excitements of life no longer have an irritating and disturbing effect upon him. When the nervous system has recovered by this means, the activity of the digestive organs and with this, nourishment and assimilation must be improved. Above all, let the patient be removed from his usual surroundings and spend some time in a quiet, rural spot, be constantly in the fresh air (in a hammock), and take short walks. The idea of remaining in bed I reject entirely. Let his diet be, on rising:—Bilz cocoa, with a little corn-flour. For breakfast:—Cream with sugar, and one or more eggs beaten up in sugar and water. At midday:—Thick soup, tender meat, roast game, carrots, green peas, pease pudding, mashed potatoes, etc., light milk puddings, and stewed fruit. In the evening:—Rice boiled in milk, ground rice and milk, with baked or stewed fruit, or raw fruit. Between meals:—Dates, walnuts, nut-bread. In the afternoon he may take some Gruyère or cream cheese, sour milk with black-bread crumbs, or cream with curds and sugar. It is advisable to drink but little and not too much milk, as is generally prescribed. The whole body should be massaged every day and trunk bath (90°), with douche on the lower parts (81°), taken. Standing in cold water, walking barefooted in the wet grass, etc., is also to be recommended.

Dr. *Ebing's* treatment:

Loss of flesh is generally the first symptom, the first alarm signal as we might say, that there are dangerous goings on in the organism, not seldom is it the first sign of an incipient pulmonary catarrh or of a similar malignant disease. Frequently, it is true, it is only the result of the nervous system being injuriously affected by anxiety or vexation.

Loss of flesh is always the outward visible sign of faulty and defective assimilation. It shows that in the economy of the organism more is spent than is received, a process which must always and everywhere lead to ruin.

If loss of flesh is attributable to any other cause, as frequently happens in the upper classes, to poverty of blood, weakness of the nerves or nourishment, the so-called forced feeding first proposed and prescribed by the American Dr. *Weir-Mitchell,* and afterwards by German doctors, is recommended for adoption.

The object of this treatment is to improve the faulty condition of nourishment and the general strength in a short time, and in the course of a few weeks to form fat and blood in sufficient quantities, and so to increase the weight of the body by keeping the patient bodily and mentally quiet, thereby securing his taking an unusually large amount of nourishment.

The treatment is best carried out if the patient be removed from his usual surroundings, and placed in a sanatorium or health resort where massage may most appropriately be applied. The increase in the amount of nourishment and in the number of meals should be gradual. At first it is advisable to give milk only, wherein great care must be observed to give it only in very small quantities, and it is recommended to take a mouthful or two of bread with it, as otherwise it will curdle in the stomach. Beginning with half a pint, the quantity may be raised in a week to two quarts in the twenty-four hours. When this milk diet has been taken for several days and has a preliminary effect upon the digestive organs, let the regular meals be kept, but only very easily digestible and nourishing food given, and the quantity increased by degrees. It is wonderful to what an extraordinary amount of food the stomach will accustom itself, and how the organism can bear a fattening diet of this kind, especially when massage is given. Should sickness or vomiting occur, the treatment must be suspended for a few days and a return made to milk diet.

The uninitiated can treat himself perfectly well, but it is distinctly advisable to have it supervised by a capable doctor.

When the treatment is given by a doctor, the result is truly wonderful; in about a fortnight four or five pounds of flesh are put on, the general state of health and complexion improves, and an access of weight to the amount of fifteen or even twenty pounds after a six weeks' treatment is by no means a rare occurrence.

Fauces Lupinæ, see "HARE LIP."

Foreign Bodies in the Eye, Nose, Ear, Throat, Gullet, Rectum, see the respective articles.

FORMICATION is a feeling of creeping, tickling, prickling, or what is popularly called the "going to sleep" of a limb, or "pins and needles." It is usually of only short duration when the nerve of the elbow is struck or pressed and thereby a prickly sensation of the fingers caused. Moreover, the falling asleep of limbs (arm, leg, foot, etc.), which, however, is without any particular signification.

This prickling feeling may, however, be caused by disease of the brain or spinal cord, and then it is a symptom of various maladies, especially ergotism, which see.

Fractures of Bones, see "BONES, FRACTURES OF."

Fractures of Limbs, see "FRACTURES."

FRECKLES are mostly found on exposed parts of the body, and are met with more frequently in summer than in winter. It is a well-known fact that fair, and especially red-haired persons, are particularly subject to freckles, the tender skin common to such persons appearing to favor this disfigurement. Freckles arise from uneven distribution of the coloring matter in the skin. The cause of the inequality in the supply of coloring matter to the skin by the blood is unknown. Freckles do not appear before the fourth or fifth year, and seldom after the fortieth or fiftieth year of life.

The occurrence of freckles is attributed to a morbid condition of the sudoriparous glands, in consequence of which their functions are performed in an abnormal manner. It has been noticed that the parts of the body affected with freckles do not perspire, while the rest of the body may perspire freely.

So-called "liver freckles" or "moles" are most frequently met with in pregnant women, and those suffering from uterine disorders. The yellow color of these freckles, which has nothing whatever to do with the liver, is chiefly observable on the forehead and spreads gradually over the entire skin of the face.

With the removal of the cause this color disappears of itself, no treatment being required.

TREATMENT.—To prevent and to cure freckles, avoid the rays of the sun, especially in spring, perspire freely in the open air, and wash before going out; avoid also everything calculated to cause a flow of blood to the face, such as getting overheated, keep the face always cool, wash the affected parts often with lukewarm water, and apply lukewarm bandages.

We also recommend careful attention to the skin, a lukewarm (95°), wet rubbing of the whole body or a lukewarm (89°) bath every day and one or two steam-baths in bed a week, followed by a bath, or a steam-bath,

followed by full-pack and bath or douche. Nothing further can be done, except to protect the face and hands carefully from the sun as much as possible. A medicinal preparation for permanently curing freckles does not exist; every penny spent on such rubbish is wasted.

Rubbing the parts with fine sand is sometimes to be recommended. All such expedients, however, as also borax soap, spirits of soap, and particularly sublimates, acetic acid, and preparations containing mercury and lead should be carefully avoided, as they irritate the skin and cause the epidermis containing the pigment granules to peel off. For Modes of Application see Index. See "SKIN" and also "PIMPLES," with reference to rubbing with sand.

Free Exercises, see "GYMNASTICS, CURATIVE."

French Roll Pudding, see "DIET."

French Roll Soup, see "DIET."

FRIGHT. If one gets greatly excited and trembles in consequence of fright, we recommend immediately taking a drink of water to allay the excitement. See also "TREMBLING."

Frost Bite, see "COLD, EFFECTS OF EXTRÈME."

FRUIT. Fruit is one of the most wholesome and nutritious natural foods, as it purifies the blood and possesses many other good qualities. It should be eaten raw, as in that state it is most beneficial.

The apple and bilberry take precedence of any other fruit. All fruit is refreshing when one is thirsty, it is cooling to the blood, soothing to the nervous system, and highly efficacious in correcting inactivity of the bowels; these are facts unfortunately not known to many. It is even less known that fruit is highly nutritious (see "FOOD, ANALYSIS OF"). Those who find that fruit does not agree with them should try to accustom their stomachs to it again, as it should not be missing at any meal.

For invalids and for those who are apparently in good health, but have morbid matter in the system, fruit will prove an agreeable detergent, dissolving and carrying off all morbid matter. To those in health it does not act as a detergent. Fruit is the very best food for mankind and cannot be too highly recommended.

The following article shows the great importance of fruit as an article of diet.

FRUIT-FOODS. For fruit-bread, stewed fruit, fruit-wine, fruit-soups, fruit-tarts, fruit-cakes, apple-dumplings, cider, apple-pudding, apple-Jonathan, rice and apple-pudding, tutti frutti, invalid's food mixed with fruit, see "DIET, NON-STIMULATING," in Index.

FRUIT, Healing Properties of. For the removal of morbid matter fruit is highly recommended. It greatly assists the natural actions of the body, by means of which the different healing processes are stimulated and kept in order.

Oranges, figs, tamarinds,*) plums, mulberries, dates, and nectarines all act as detergent medicines; pomegranates, cranberries, blackberries, sumach-berries,**) raspberries, barberries, quinces, pears, wild cherries and medlars as astringents; grapes, peaches, strawberries, bilberries, black currants, and melon seeds have considerable diuretic properties; gooseberries, red and white currants, pumpkins, and melons refresh and cool; lemons and apples are also refreshing and at the same time impart a soothing influence to the stomach.

An orange taken early in the morning opens the bowels; in some cases the results are so decisive that this fruit may be considered a detergent; and in general cases one can rely safely on its producing the desired effect. Some granates produce an astringent effect, and may be taken in cases of relaxation of the throat and uvula with good results. Tea made from the bark of the roots is used as a cure for worm complaints, and is especially successful in removing tape-worms. A good poultice for burns and small ulcers can be obtained by cutting a fig in two and applying the inside to the injured part. For removing tartar from the teeth, strawberries and lemons, locally applied, will be found helpful. In cases of sickness, sea-sickness, and nausea arising during pregnancy, apples will prove a corrective medicine. They also immediately relieve the nausea, occasionally caused by smoking. The ripe persimon (American date-plum) is agreeable to the taste; the same fruit in its unripe state is a powerful astringent; in consequence of the large amount of tannin it contains it is used in cases of diarrhœa and in the early stages of dysentery. The oil of the cocoa-nut is recommended as a substitute for cod-liver oil, and is frequently used for consumptive patients. An agreeable drink for fever-patients can be made from barberries. Dutch medlars are astringent and not very palatable. In consequence of their mild and nutritious properties, grapes and raisins should not be missing in any sick-room. Highly to be

*) Tamarindus Indica (Indian tamarind), belongs to the dicotyle family of the Caesalpiniaceen, and has pod-shaped fruits, the leguminous pith of which is preserved in the same way as fruit. It is also used in the dispensing of medicines.

**) Sumach- or Vinegar-Tree, lat. Rhus, one of the anacardiaceen, is a poisonous plant. The berries of the Rhus Typhina, which grows in North America, are used in the preparation of vinegar, as they strengthen the acidity. Poisonous Sumach, Rhus Toxicadendron, is used in dispensing poisonous medicines.

recommended is the "grape-cure," which is used with the most gratifying results in the treatment of the following diseases:—Congestion of the liver and stomach, enlargement of the spleen, scrofula, consumption, etc. The diet consists of water, bread and a couple of pounds of grapes for each meal, nothing else being allowed. Quince-seeds have a soothing and astringent action.

FRUIT.

From THEODOR HAHN'S book.

In the southern countries the inhabitants, no doubt, obtained their first food from the native fruit-bearing trees, before learning the value of grain-foods. This is all the more probable when one considers that many southern fruits, *e. g.*, the banana, date, bread-fruit, fig, melon, chestnut, as well as the different sorts of almonds and nuts, contain sufficient nutritious properties to sustain the human body. With the inhabitants of the colder climates the case was different, as they were in all probability acquainted with the value of grain-culture before advancing into these latitudes. Although our ancestors in Central Europe, and even the Arcadians of Greece, may have used acorns and wild fruit as articles of food, they in all probability only did so in a few cases. At the present day fruit is not the chief article of food with Europeans, but forms only an addition to the daily dietary. Nevertheless fruit is for mankind, after bread, the most valuable of foods, and that not in consequence of its nutritious properties, but owing to its fragrant smell, its refreshing, cooling properties, and its aromatic, agreeable taste.

Should fruit be eaten raw or boiled? Instinct and common sense say, raw. Instinct, because the fruit is thus in its natural state, and is also fresher, more aromatic, and sweeter to the taste; common sense, because it believes that the volatile, aromatic taste of fruit is lost by boiling. With some patients, however, boiled fruit agrees better.

Full Bath, see Index.

Full Pack, see Index.

Full Steam-Bath, see Index.

Full Steam-Bath in Bed, see Index.

Furuncle, see "BOIL."

Furry Tongue, see "TONGUE."

G.

Galacto Dieta, see "MILK DIET."

Gall Bladder, see "CHEST AND ABDOMINAL CAVITY, ORGANS OF THE."

Galloping Consumption, see "PHTHISIS."

Gall Stones, see "STONE."

Gangrene, see "MORTIFICATION."

Gangrene, Hospital, see "MORTIFICATION."

Gangrenous Boil, see "CARBUNCLE."

GARGLING consists of washing the throat and mouth with a liquid, by which a gargling noise is made. It is kept from descending into the larynx by the expiration of air, and can thus only reach the epiglottis. Gargling is of great benefit in difficulty of swallowing and diseases of the throat, gullet, and larynx.

GASTRALGIA. In addition to the ailments mentioned under "STOMACH, DISEASES OF THE," there are several other kinds bearing relation to various and totally different diseases, or, as the case may be, arising from them.

SYMPTOMS.—A spasmodic, searching, boring, tightening, pressing, smarting, or burning pain, which sets in at the epigastric notch, or the pit of the heart, and frequently extends as far as the spine.

This pain takes place with the stomach either empty or full, or after certain ailment, or it comes on spontaneously. Mostly, however, it begins some time after a meal, and particularly after drinking cold beverages.

There are often associated with it loss of appetite, depressed digestion, vomiting (even spitting of blood), rising from the stomach, etc., and in cases of higher degree white, wan complexion, emaciation and loss of strength, cold limbs, colic, palpitation, hiccough, choking, general spasms, great debility, fainting, and other nervous phenomena.

CAUSES.—Mostly some sore spot on the stomach, or so-called abscess of the stomach, excessive anæmia, degeneration of the coat of the stomach, inflammatory stimulation of the spinal cord, colds, acrid gastric juice, acidity of the stomach, and, above all, nervous conditions.

Bilious stomach-ache comes on after rage and anger.

This ailment is produced and aggravated by frequently drinking coffee and, in general, by hot drinks, further by physic, worms, flatulence, drinking no water, also, and more especially, by the following favor-

ite beverages, frequently indulged in to get rid of spasms and stomach-ache:—Whisky with pepper or peppermint, strong coffee with rum, calomus-brandy, etc. Such remedies are capable of easily causing perforation of the stomach and thus causing death.

TREATMENT, as indicated under spasms of the stomach, but weak persons must apply a somewhat milder treatment, consisting in partial steam-bath of twenty minutes' duration, followed by bath (80°) and affusion, mainly on the region of the stomach, or three-quarter steam-bath in bed, after which a tepid, wet rubbing of the whole body (73°) is to be given.

Stomach-ache and spasms sometimes diminish by bending the body double, or by strong pressure on the stomachic region, or by the patient taking some nourishment.

Gastric Catarrh (Acute), see "STOMACH, CATARRH OF THE."

Gastric Catarrh (Chronic), see "STOMACH, CATARRH OF THE."

Gastric Fever, see "GASTRITIS AND TYPHOID FEVER."

Gastritis, see "STOMACH, CATARRH OF THE."

Gathering, see "ABSCESS AND ULCER."

General Principles of the Natural Method of Healing, see Index.

Genu-Valvum, see "KNEE-JOINT, DISEASES OF THE."

GIDDINESS (Vertigo) proceeds from thickening of the blood, and particularly from a rush of blood to the head; from congestion of the brain (or want of blood in the brain); from irritation of the nerves, of the brain, spine, stomach, or abdomen.

Giddiness is a condition, under which the sufferer loses his equilibrium; surrounding objects appear to be in motion; he staggers as he walks; is obliged to stand still to avoid falling; even when sitting or lying he has the sensation of falling.

GENERAL CAUSES.—Swinging, or rapid turning movements; looking down from a great height; substances (or fluids) which influence the brain, such as alcohol, poisons, gases; congestion or want of blood in the brain; various diseases, etc. The following may be more particularly mentioned:

1. Giddiness, due to determination of blood to the brain (dizziness), results from suppression of the menses, from hemorrhoidal veins, and other forms of hemorrhage; from heating drinks (wine, beer, coffee, etc.); from narcotic inhalations, and poisons, coal gas, and fumes from burning

lime; sleeping too long; congestion, or poverty of the brain; anatomical alternations in the brain; pregnancy.

2. Rheumatic giddiness, occurring with sudden changes of weather, and after previous pains in the limbs, catarrhal symptoms, cold, etc.

3. Nervous or hysterical and hypochondriacal giddiness, resulting from exhaustion or violent emotion, and other causes. It may be accompanied by nausea and vomiting, watery urine, or disturbance of the monthly period.

4. Giddiness resulting from abdominal disorder or disease, and particularly from disease of the liver.

General Treatment.—Avoidance of known causes, and counteracting treatment based upon them. If determination of blood to the head is the cause, as generally happens, the head should be raised, and derivative measures be adopted, such as a foot bath daily for fifteen or twenty minutes, followed by a cold knee or thigh affusion, and at night stimulating leg and foot packs. A lukewarm rubbing of the whole body (73°) should be given the next morning. As circumstances require, three-quarter or full steam-baths in bed may be given. Sometimes lukewarm (82° to 86°) hip-baths of twenty minutes' duration, and bathing of the head will be necessary. Walking with bare feet, and in (dewy) grass is a remedy strongly recommended. Non-stimulating diet, exercise in the open air, sleeping with a window open; enemata if constipation gives trouble, and as a derivative. Vigorous massage of the neck; stroking of the forehead and temples, and thorough kneading of the arms and legs; rubbing of the chest and back, with hands dipped in cold water, are also recommended. In nervous giddiness, *e. g.*, the rotary head movements and rotary trunk movements, curative gymnastics, should be practised. A draught of cold water occasionally will not be out of place.

In such cases of giddiness vigorous rubbing of the feet is advised; the water used should be about 52°, and the rubbing be undertaken when the feet are warm.

If the giddiness comes from poverty of the blood in the brain, bending the head forward and downward (or bending the body from the waist upwards, and letting the head hang forward) will be the natural remedy, and derivative treatment the reverse of correct. The washing of the upper part of the body with water of from 73° to 77° has a very favorable effect, as have also the Kneipp affusions.

If there is a tendency to giddiness, strengthening treatment should be adopted. See also "Giddiness" under "Kneipp Cure." For further particulars of Massage, Curative Gymnastics, and Modes of Application, see Index.

CURE OF GIDDINESS, etc.

By Herr von Seth, of Bremen.

Herr *Drewes*, the proprietor of the far-famed Restaurant, "Café Bismarck," in Bremerhaven, suffered some years ago from serious nervousness, insomnia, and obstinate constipation. The family physician had tried all possible remedies, including a variety of medicines, without succeeding in ameliorating the patient's condition. A course of baths also failed of success. In the autumn of last year, during the fair in Bremerhaven, Herr *Drewes* came to me. He could not endure the turmoil of the fair, and wished to know what sea or other bathing place I would recommend to him; as he was afraid to choose one for himself. He had not thought of going through a course of treatment under my roof. He took the opportunity of informing me that eminent doctors, whom he had consulted, differed as to the nature of his complaint and that no one of them had been able to give him relief. I proceeded then to put some questions to him, and ascertained that he was suffering from excessive flow of blood to the head, and that attacks of giddiness and insensibility were of not unfrequent occurrence. There was also serious obstruction of the bowels, and a marked swelling of the abdomen. I told him that under the circumstances a so-called bath cure was not to be recommended; but that if he would remain with me I hoped to be able to put him to rights in a short time. He consented; took two deep hip-baths daily, of the temperature of 86°, and lasting twenty minutes. In the bath the abdomen was vigorously massaged; and, after that, came a good rubbing and a long walk. The diet consisted of a plate of meal soup with bread in the morning: for early luncheon (about ten o'clock) fruit, bread, and water: in the middle of the day meal soup again, with meat and bread. In the afternoon the early morning regimen was followed; and the evening meal was the same as the early luncheon. On the fifth day came the long-wished-for sleep; on the eighth the terrible anxiety abated, and in four weeks the patient was cured.

GLANDERS. This disease is communicated to man by the transmission of the secretions of the mucous membranes of the nose or mouth, or of the sweat of horses, asses, or other quadrupeds affected with this disease; the result of which is the development of an ailment quite similar to that from which the animal is suffering.

Symptoms.—The more direct the contagion, *i. e.*, the more directly the noxious fluid is conveyed to the blood of a person, *e. g.*, by an open wound, the more rapid the development of the disease. The wound through which the contagious matter was communicated gets painful after the lapse of three or four days, and is surrounded by a circle of

red stripes. Then shivering, attended by fever and violent pains in the joints, sets in, and knots, varying in size from a hemp-seed to a pea, begin to form on the mucous membrane of the nose, eyes and mouth and spread from these to the gullet, throat, lungs, stomach and intestinal canal. Then follow deep-seated general debility and decrepitude. There are copious and frequent discharges of blood from the nose, purulent matter being ejected from the lungs in large quantities. Finally, the knots that have formed in the skin begin to ulcerate, and the sufferer often dies from blood poisoning.

If the poison should be communicated otherwise than by a wound, months may elapse before the results of the infection begin to assert themselves in the shape of general weakness, *e. g.*, headache, lassitude, impaired digestion, fever, etc.

The course of the disease is then also different, the mucous membrane of the nose being attacked in a lesser degree; that of the lungs, on the other hand, in a far greater degree: the skin generally remaining quite free from tubercles.

TREATMENT.—Daily a steam-bath in bed of an hour's duration; or, if the patient prefer it, a dry pack. After this a vigorous wet rubbing of the whole body with water of 72°. Better still is a full steam-bath; followed by a full pack and bath, frequent rinsing and washing, or syringing of the mouth and nose (81° to 86°) and all the affected parts, and enjoyment of fresh air. When there is fever, fever treatment should be applied.

Above all, avoid all contact with horses suffering from glanders, so as to run no risk of contracting such a disease.

A wound recently poisoned should at once be sucked free from all poison, and the mouth immediately washed and rinsed perfectly clean; and the person injured should restrict himself to a non-stimulating vegetarian diet. If there be a natural healer near, call him at once. For Modes of Application, see Index.

Glands are sponge-like organs of the body abundantly charged with blood. Their office is to purify the blood, or to convey to it various fluids. These fluids vary in their constituents and character in the different glands, and they are divided, according to their respective functions, into the:

1. Sweat and sebaceous glands; both enclosed in the skin. The former draw impurities and morbid matter from the blood, and excrete them in perspiration. The latter, in which a fatty matter is formed, serve to lubricate the skin and keep it soft and pliant;

2. The mucous or pituitary glands, embedded in the mucous membrane, serve to keep it moist and slippery;

3. The salivary and pancreatic glands supply a digestive juice which converts starch into grape sugar;

4. The lymphatic glands, which may be described as the filter of the blood. Foreign or injurious constituents of the blood are kept back in these glands, and rendered harmless;

5. The mammary glands in the female breast supply the nourishment which supports infant life for a period not usually exceeding one year after birth;

6. The male testicles, also a kind of gland, in which semen is formed;

7. Finally, the liver, the spleen, the kidneys and the gland near them (supra-renal gland) must be included under this head.

Inflammatory processes are often set up in the glands. Whenever such a thing takes place, it may be confidently assumed that there is something wrong with the blood, or with the circulation, or with both. Hence it is that glandular ailments are so often found in children who have inherited from their parents the baneful legacy of impure blood. It is so with the great number of scrofulous and rickety children, who have the germs of disease in them from their birth; but the disease may not be matured till later, when an unhealthy state of the blood arises from improper food, or when injurious substances find their way directly into the blood. We are mindful here of the great number of unfortunates who suffer for years, and, perhaps, all their lives, from disease in the glands, as a consequence of inoculation with impure lymph in vaccination. We think also of the innumerable victims of syphilitic poison, infected or inherited, and making itself felt mostly in the lymphatic glands.

Weakness of the heart is also a cause of a damming up of the ducts, and consequent swelling and inflammation in the glands.

Treatment.—This will be indicated by the diagnosis. If the swelling and inflammation are attributed to vitiated or poisoned blood, or to an unhealthy condition of the blood, or to inadequate circulation, the course of treatment must be prescribed accordingly. It is only necessary to observe nature (correctly) in her efforts to cure, and to support those efforts. There can then be no mistake. It is especially the function of the glands to purify the blood; by secretion (as in the case of the lymphatic glands) and excretion (as by the sweat glands, kidneys and liver). The activity of those glands should, therefore, be stimulated by means of steam-baths, packs, baths and washings. The work of the system will thereby be considerably lightened. The circulation should

also be regulated by massage of the whole body, and by Kneipp affusions; and, finally, every effort must be made to improve the state of the blood by good, but non-stimulating food, and good air by day and night.

We must here observe that this class of diseases does not always admit of rapid cure; patience and perseverance, however, will generally bring about a satisfactory result.

CURE OF SWOLLEN GLANDS.

from the Rev. Mr. Koenig's book, "The Natural Method of Healing."

When our little son was four months old, we remarked on the sole of the left foot a boil which did not then appear dangerous, but which, in a very short time, became so inflamed that we began to be anxious, not knowing what it could mean. At the same time a small red point showed itself on the left cheek, close under the eye, which we took to be an abscess. Boils also appeared on the back of the right hand and on the two elbows; and these awakened our apprehensions, as we perceived that they were glandular.

The boy was now eight months old; the boils had become larger and larger; the foot was so swollen that for a long time it had not been possible to put a shoe on it; and the whole side was paralyzed by pain; the abscess under the eye had increased to the size of a hazel nut, so that the eye was nearly closed; the movement of both arms had become very difficult to the child, as, owing to the sores on the elbows, the arms were swollen to the thickness of a man's. And that was not all. The number of the boils increased; more appeared one after the other; and now we remarked one behind each ear, the one behind the left ear being particularly large. We tried all remedies which suggested themselves to us or which were recommended to us by friends; but we were obliged to call in Dr. *K.*, who made three cuts in the boil under the eye, with scissors. We were prepared for the escape of a great quantity of matter; but only blood flowed from the wound, although we pressed round it well. In spite of all, the sores increased in size; those behind the ears were as large as goose eggs; the one under the eye was covered with a scab, and larger than ever: on one hand the sore had broken and became somewhat, but not much, smaller, and very little discharge issued from it.

The child was now fifteen months old, and literally unable to see out of its eyes, so great was the swelling round them. The whole body was one large tumor; the skin red, tightly drawn, and shining. In this our need we heard of the Rev. Mr. *Koenig's* method of healing from a family, with whom we were acquainted, and who had experienced great benefits from it; and we prevailed upon the reverend gentleman to take our child in

hand. He at once ordered that water compresses should be laid on every part of the body, where there was a sore, and that at night the child should be wrapped in wet linen, having only the arms free (a full-pack). The child very soon became accustomed to this. The head was covered day and night with a wax-cloth cap, in the inside of which compresses were sewn, one for every sore; and the cap was made to fit close everywhere, so that only the face was visible.

In consequence of all these continuous compresses, the swellings had everywhere increased in size, just as Mr. *Koenig* had said they would. On arm, foot, and elsewhere, they began, at last, one by one, to break, and to discharge a great deal of matter, the sores thereby becoming smaller. The one behind the left ear was the most obstinate, ever increasing in size, and causing the child great pain. At last, to our great joy, this one also broke; and only those who saw it could believe that at least a pint of matter came from it, at first thick and dark green in color, later thinner and lighter, and so offensive, that, although it was winter, we had to open doors and windows, and finally to smoke, in order to get rid of the smell. We caught the matter in cloths and sponges; and it was nearly an hour, before the flow abated. The trouble, however, was mastered; the abscess visibly diminished in size; the face of the child recovered its normal appearance and form; the flow of matter continued; the packing was kept up; and the child was visibly getting well. Soon afterwards we were able to give him more nourishing food than had been allowed in the first stage of the cure; and now, when the boy is nearly two years old, he is plump, fat, fresh, and rosy; instead of the sores there are only slight scars; and of an abscess there is not the faintest appearance.

May these lines, true as they are to the letter, contribute to point out to other sufferers the way to succor, as well as serve to convey to that noble, self-sacrificing, indefatigable, and disinterested worker, Mr. *Koenig*, a feeble token of our gratitude to him—a gratitude which can be felt, but is beyond the power of expression!

May the blessing of Heaven, in richest measure, be his portion!

Nicolaus Kaget, Ackerstrasse 32.

My wife has suffered for the past seven years from abscesses on the neck and right hand. On the upper surface of the hand there were more than a dozen open sores. The hand was so swollen that people were appalled at the sight of it.

The throat was so sore inside that the sufferer could not speak or eat. In six years she had consulted eight of the most eminent physicians. By the advice of many of her friends, she underwent a seven months' course under Herr Geheimrath Dr. *A.*, without—I regret to say—any favorable

result. On the contrary, she was told by Dr. *A*. that the hand must be amputated; to which she replied that she would rather die. She then went to Dr. *D*., who pronounced her incurable, and said that she had better go to some one else. She accordingly went to Dr. *S*., and was told by him that she must go into the hospital—to which she demurred. Having now given up all hope of being cured, she turned to the Rev. Mr. ***Koenig***, and I must, to my inexpressible joy, acknowledge that a course of barely seven weeks under the natural method of healing has already given us the brightest hopes of her recovery; which I hereby declare for the information of all sufferers.

Berlin, October 6, 1863.

Wilhelm Seibt, Mariannenstrasse 13.

See further, "TONSILITIS."

CURE OF A GLANDULAR ABSCESS

in the BILZ Sanatorium in Radebeul-Dresden.

In the summer of 1897, a young man, aged twenty-one, came to this establishment with a large glandular swelling on the left side of the neck. A short time previously he had entered upon his year of military service as a volunteer, and was then in perfect health. During the period of service, however, the swellings appeared, and, as they, of course, defied all military treatment, and increased in volume, he was eventually discharged. As the young man had inherited a sound constitution from his parents, and had never suffered from any sexual disease, there could be here no question of corruption of the blood; and the cause of the disease had to be looked for elsewhere. It was sought accordingly, and discovered. The action of the heart was extraordinarily weak. It had been unequal to the strain put upon it by the exertion and fatigue incidental to his military duties. Consequently, the circulation had been inadequate, and the glandular swellings had developed themselves. With the knowledge of the cause of the disease, the plan of treatment came clearly into view. Good nourishing food, and strengthening of the heart by systematic gymnastics and walking exercise. Further, dispersion of the swelling by derivative treatment, and provision for improving the circulation by the employment of the various Kneipp affusions. After a three months' course the swelling in the neck was reduced to a minimum, which only needed careful after-treatment at home to cause it to disappear altogether.

For further cases, see "SCROFULA."

Glands, Swelling of the, see "LYMPHATIC GLANDS."

Glycosuria, see "DIABETES."

Goggle Eyes, see "BASEDOW'S DISEASE."

GOITRE (Wen or Thyrocele) is a gradually developed enlargement of the thyroid gland, which shows itself in front, and often at the sides, of the neck. This form of swelling in the throat is generally painless, soft, and elastic. In some cases it may affect the windpipe and gullet, and seriously interfere with the breathing.

CAUSE.—Opinion is divided on this subject. In some places the disease is attributed to the custom of carrying heavy weights on the head, which prevails particularly in mountainous districts; in other places the quality of the drinking water is supposed to be the cause.

TREATMENT.—Over-exertion should be avoided. Endeavors should be made to reduce the swelling by local stimulating compresses and by gentle massage—kneading and stroking—four or five times a day. Massage may also be given as follows:—Knead and press the swelling between the fingers, twice or thrice a day, and afterwards, on each occasion, stroke from above downwards, either with the finger and thumb of one hand, or with the little finger edges of both hands, applied to the neck on either side. Improvement of the condition may also be obtained by taking three or four full steam-baths weekly, followed each time by a full-pack with extra compress on the throat, and a whole bath as the conclusion of the process. The amount of fluid taken internally should be as little as possible for several weeks. Operations are very uncertain, and often dangerous; amputation of the tumor has sometimes been followed by imbecility and idiocy. For Modes of Application see Index. Compare also the first report of cases under "SCARLET FEVER."

GONORRHŒA. Contrary to the view formerly entertained it is now considered certain that the sexual organs are subject to three kinds of infection:—Gonorrhœa, chancre, and syphilis, which were till recently looked upon as varieties of the same disease. (See "CHANCRE" and "SYPHILIS.") Gonorrhœa is a catarrh of the mucous membrane of the urethral canal, arising from contagion or excessive social intercourse, and characterized by a slimy-purulent discharge. It is a local affection, limited to the urethra and the organs connected with it, such as the bladder, kidneys, testicles, vagina, uterus, and inguinal glands. If a portion of the pus be communicated to the eyes, it will give rise to the most severe and dangerous form of ophthalmic inflammation.

SYMPTOMS.—After an interval of from three to six days, from the date of the contraction of the disease, a redness is visible at the orifice of the urethra, accompanied by a clear, transparent appearance; the patient feels a disagreeable irritation and burning at the lower end of the organ; then a slimy secretion commences, with pain in passing water; the discharge increases and assumes a purulent character, leaving stiff, yellowish green

spots on the linen; the pain in passing water grows more severe, causing the patient to writhe, grind his teeth, stamp his feet, and perspire in the face. This painful stage lasts from eight to fourteen days. Painful sexual excitement is experienced, with frequent erections, followed by seminal discharges. As the disease subsides, the pains diminish, while the purulent discharge increases in quantity; finally the pain in passing water entirely subsides, the discharge ceases, and the patient generally recovers in about a month, though the disease has been known to continue for several months.

Gonorrhœa may be accompanied by inflammation of the testicles and epididymis, inflammation of the inguinal glands (bubo) sometimes developing a purulent character; catarrh of the bladder, the appearance of so-called figwarts or condylomata (wart-like excrescences on the mucous membrane of the genital organs), fever and disordered digestion.

Bastard clap in the male is a slimy, purulent secretion on surface of the foreskin and the glans, which may occur either in combination with gonorrhœa or independently as the result of uncleanliness or tightness of the foreskin. *Gleet*, a thin and scanty discharge from the urethra occurring principally in the morning, is a consequence of a careless manner of life during gonorrhœa. Stricture of the urethra, caused by improper treatment of gonorrhœa, may succeed the disease, and sometimes assumes a very severe form. The treatment requires much patience and self-denial. See "URETHRA, STRICTURE AND DILATATION OF THE."

If gonorrhœa be neglected, or abstention from alcoholic beverages, highly seasoned food, meat, and other irritating articles of diet be not rigorously enforced, it may become chronic, lasting a considerable time, and may assume a very serious form.

TREATMENT.—The most important condition of the treatment is rest and an entirely [illegible] stimulating diet, carefully avoiding all highly seasoned and salted food, as well as all alcoholic beverages. Water should be drunk copiously, and fresh air provided for, and everything avoided tending to arouse sexual feeling.

In the next place a half steam-bath, or a half steam-bath in bed (the latter is a half-pack with three hot-water bottles, wrapped in wet linen, applied to the feet), is to be given daily, together with a rather wet extra compress (73°), on the sexual organs. Both of these applications should be followed by a lukewarm bath (89°).

Give also every day two or three lukewarm (77°) hip or trunk baths of from fifteen to twenty minutes' duration, an abdominal compress at night with T pack if it can be comfortably borne by the patient, and enemata in case of constipation. Instead of hip baths, the sexual organs may be bathed three or four times a day for from ten to twenty minutes

at a time, with water of 82° to 86°, or 77° if it can be well borne. Copious drinking of water is strongly recommended to dilute the urine as much as possible. Injections (82°) may be made into the urethra; this should, however, be performed with great care, to avoid irritation. For this purpose a syringe should be employed having a round, but on no account an edged, orifice, so as not to cause injury to the inflamed membrane. The injections can be made several times a day, particularly after passing water. During the intervals local stimulating or soothing compresses (73° to 77°), well covered with flannel, should be given. A suspensory bandage is advisable in case of inflammation of the testicles. Plenty of fresh air is of great importance. See also "Kneipp Cure." For Modes of Application see Index.

GOOSE-SKIN. This term is used to denote the rough and wrinkled state which the skin of the body assumes in consequence of cold, fear, agitation, fever, and other nervous excitement; and which consists of a contraction of the muscular fibre which surrounds the various pores of the skin.

GOUT. This disease is much dreaded on account of its pertinacity, for it is as lingering as it is painful. The disease does not break out suddenly, but long before the first attack a gouty subject has troublesome and characteristic symptoms of the disease. There are various indications proclaiming its approach.

SYMPTOMS.—Stout persons are for some time previously troubled with piles, broken sleep, palpitation of the heart, a feeling of repletion, heaviness, loss of appetite, slight perspiration, mental indisposition, irregularities of indigestion, oppression on the chest, cloudy urine,etc.

These premonitory symptoms become more frequent and more pronounced until finally the first attack of gout makes its appearance in the form of an extremely violent, piercing pain in the big toe, which swells and becomes red and inflamed. The urine assumes a deep red color, and shows a thick sediment. The pain may, at the same time, become fearfully violent, so that the patient, trembling in his whole body, throws himself about on his bed, with the perspiration standing in beads on his forehead; the skin is hot and dry; the pulse quick; the patient is tormented with thirst, and even with fever. The pain relaxes towards the morning, only to return next day with re-doubled violence. The first attack and its repetitions usually last from four to nine days, and with the adoption of a more rational mode of life the attack ceases. But if such a course of life is not continued, the attack will recur (especially in the early part of the year), the intervals between the attacks will get shorter, the visitations longer, swelling and red color, disturbances of digestion, slight fever, but more bearable pains, continue for weeks, and general wasting sickness super-

venes. When persons, who are affected with the gout, have suffered from bad digestion, some of the joints are only moderately red, but nevertheless become very painful, and are so even after a single error of diet.

CAUSES.—Principally an excessive and too rich supply of nourishment, indulgence in wine (especially strong wines, containing a high percentage of alcohol), and insufficient occupation and exercise. It is supposed that the blood assumes a morbid character by becoming overcharged with uric acid, which, in turn, is precipitated in the form of urichloric acid on the knuckles and ligaments of the joints. Also congenital predisposition, sexual excesses, especially when sudden abstinence in this respect takes the place of long-continued indulgence. Also sudden transition from abstinence to rich living from exertion to idleness. Suppression of ordinary hemorrhage, more especially of hemorrhoidal discharges, and the non-appearance of the menses.

Gout is not solely produced by luxurious living and want of exercise, but also by its opposites, great abstemiousness, coupled with great exertion. It is also engendered by habitual exposure to cold and damp. See also "RHEUMATISM" and "BACTERIA."

TREATMENT.—Avoidance of the causes in the first place; in strictly non-stimulating diet, to which the patient must accustom himself gradually; drinking plenty of fresh water; abundance of fresh air, and sleeping with the window open at night; adequate bodily exercise, and daily motions by means of enemata, if necessary. In case of obstinate costiveness, see "CONSTIPATION."

When an attack comes on (which may be considered as nature's endeavor to heal), soothing compresses, containing plenty of moisture, should be put round the painful joints. When they are taken off, mild lavations with bare hands, followed by massage treatment, very gently at first and gradually becoming more vigorous, and then again soothing compresses. The compresses of the inflamed and painful places should be rather wet, so that they may be worn longer and thus the patient not troubled with frequent changes. During the intervals perspiration should be induced once a day, if possible by means of a steam-bath in bed, duration from an hour and a half to two hours, followed by a lukewarm (88°) bath or tepid (72°), wet rubbing of the whole body, or a box steam-bath (duration, fifteen minutes, and followed by bath). The painful joints also to be treated by massage after the bath. For the rest, a strengthening treatment to be introduced gradually. Good results have been obtained by sun-baths. A regenerative treatment is likewise advantageous, either alone or in combination with magnetism.

TREATMENT.—By massage, as in acute articular rheumatism, but far more gently, otherwise harm may result. After massage, oil compresses

(simply oiled linen rags) to be put on the inflamed parts, and over them cold-water compresses, often repeated (the oil-rag remains on for one day). These have a good effect. Massage consists here in kneading the whole body in the painless intervals, as well as curative gymnastics (Group IV). Where gout contracts the muscles of the arm, hand, or leg, apply in the two former cases circular motion of the arms, the "8" movements, stretching and bending the fingers, in the latter case, rotatory motion of and raising the legs, etc. See also treatment under "RHEUMATISM." If a sufferer is congenitally predisposed to this disease, he must avoid nitrogenous food, especially fat meat, cheese, and alcoholic liquors, more particularly if he has to lead a sedentary life.

KNEIPP CURE.—According to Kneipp, the solution of the gout poison must be effected by:

1. Lavations with water;
2. Packs;
3. Affusions:
4. Baths.

Any one, who understands what effect water has in these applications, can cure gout. It must not be forgotten, however, that when the body has been racked and tormented with the gout for years, the patient cannot be restored to health in a few days. A cure is sure to be effected with perseverance, and if the orders given by the natural healer are strictly carried out. For Modes of Application see Index. See also "MASSAGE," "CURATIVE GYMNASTICS," and "Kneipp Cure" in Index.

Kneipp is quite correct when he says: "Even though, in the opinion of medical authorities, there is no remedy for gout, water is and always will be one. He that hath ears to hear, let him hear!"

CURE OF GOUT.

(From WEICKER's book, "Nature Cures."

Miss *Fl. Sch.*, who had for a number of years suffered from chronic pharyngitis and rheumatic headache, and had been treated medically, ultimately being pronounced incurable, completely recovered her health, lost through indulging in meat, wine, beer, coffee, spices, and medical poisons. The remedies she used were, cool, wet rubbings, full packs; cool hip baths, head compresses, foot and calf packs, fresh air, rest, and bodily exercise, as well as vegetarian diet. Though weak and chlorotic before, she is now strong and healthy, and a true believer in treatment without medicine and in a vegetarian diet.

GOUT CURED.

by Baron v. Bistram.

If our privileged doctors are not very successful in their treatment of diseases in general, this is especially the case in their treatment of gout. In proof of this assertion we may mention the fact that the most eminent physicians, like *Sydenham, Boerhave, Fr. Hoffmann, van Swieten,* and many others, who have written at length on the subject of gout, could neither cure themselves nor others. The celebrated *Sydenham,* who wrote the most important work on gout, himself died of podagra.

What is the good then of all these learned treatises, if they do not lead us to the desired goal, the recovery of our health? The cure has not to be effected on paper, but on the patient. The sufferer's interest does not centre in idle words, but in solid facts. We see from the paper "Das Neue Wiener Blatt" that the highest medical authority, Professor *Skoda,* has suffered from attacks of gout for the last twenty years, accompanied, from time to time, with paroxysms of pain. But it was only lately that gout showed in the person of Prof. *Skoda* what a dangerous character it can assume. In the left big toe and in the sole, decay of the tissues attacked by the gout has set in. From the open sores, chalky deposits issue in great quantities. The swelling has extended to all the joints of feet and hands, elbows and knees. Prof. *Klob* prescribed a mixture of atropin and morphia to be injected under the skin, which had to be discontinued after the fourth day, as it caused vomiting, entire loss of appetite, and the decay of the vital forces.

From all quarters of the globe telegrams arrive, asking for information about the famous patient's condition, but of help there is no prospect, because it has to come from the privileged physicians. What are the conclusions to be drawn from what we have said? That not gout, but prejudice is incurable; that it is by no means logical to look upon gout as an incurable disease, merely because the highest scientific authorities of privileged medical science do not know how to treat it. What other chronic disease, we humbly crave permission to ask, does appear curable in the eyes and under the care of privileged physicians? Do the various diseases of the limps, liver, stomach, kidneys, heart, or nerves? Let us have the pleasure of meeting with a single case, where an approved doctor has succeeded in curing one of this host of diseases. Thousands are waiting in vain for this pleasure, but for the present our readers must content themselves with the results attained by the Natural Method of Healing in the treatment of gout, results attained even in inveterate cases and with patients advanced in years. We might prove our assertion by giving instances without number,

if we did not fear to tire our readers with needless repetitions. The following report, however, may serve as an example of many similar ones.

This case of gout cured is that of an elderly lady, nearly sixty years of age, who says: "I suffered for many years from gout in my hands, feet, and head, the consequence being almost entire loss of sleep. By the advice of the physicians I visited nearly every watering place in turn, but, alas, without any good result whatever. Although relief was always promised at Christmas time, that was just the period when the pains were almost unbearable. Instead of the promised relief the gout also attacked my eyes, so that I now ran the danger of becoming blind, in spite of all the oculists whom I consulted. Their medical assistance was mainly limited to ordering me to wear all sorts of spectacles, among them some with dark blue glasses, ground in different directions, most necessary—they said—for my squinting eyes, although this defect had never been noticed by any one before. In consequence of these and similar directions given by these omniscient gentlemen, my eyes suffered to such an extent that it was suggested that I should, as a last resource, undergo an operation. Very fortunately for me, I happened to hear of the wonderful cures of the hygienist, Baron *v. Bistram*, and made up my mind at once to apply to him. The first thing he ordered me to do was to put away the dark-blue spectacles, as I neither squinted nor had I any particular complaint of the eyes. The affection of the eyes would vanish with the cure of the gout, he said. And so it was. After following all his directions for four months, I was relieved from my trying disease, and can at present, a thing I was not able to do before, read even the smallest print without glasses. I shall praise God, as long as I live, for having led me to this man.

"Dresden, Rosenweg No. 28. Mrs. *A. Schulz.*"

Such are the results of the Natural Method of Healing which *Skoda* would have attained twenty years ago besides curing himself of his own disease, if he or his colleagues had troubled themselves a little more about the rationale of the Natural Method of Healing.

GOUT.

A case treated in the Bilz Sanatorium.

Mr. *P.*, merchant, of C., aged forty-one, was taken to the above institution on the 13th of June. He was in a helpless condition and unable to walk. He had had measles and scarlet fever as a child, but had otherwise been in good health till five years ago. At that period he had an attack of gout for the first time, which was treated medicinally. His condition had improved, at any rate for a time, but he had since had attacks of gout,

more or less violent, every year. The last visitation of the disease, which, starting from the balls of the feet, had gradually attacked all his joints and rendered every movement impossible or excessively painful, induced the patient at last to give the Natural Method of Healing a trial. The result of the examination showed great pain in all the joints at any active or passive movement; also some distension of the stomach and somewhat pronounced enlargement of the heart; the beating of the heart was weak, but distinct, showing that there was nothing wrong with the cardiac valves. The treatment consisted in general and partial applications of steam, followed by tepid baths and douches to dissolve the morbid deposits in the joints, and promote assimilation. Sun baths, followed by cool water applications, were given by way of change, and for the same object a vegetarian diet, with plenty of lemon water, was ordered at the same time in accordance with the rules of the establishment in cases of gout. This treatment promptly had the desired effect. The pains gradually subsided, the patient recovering the use of his joints in the same proportion. In a week he was able to walk with assistance, in a fortnight he only required a little support from his stick, and in a few weeks he could walk without any assistance, and was able to return to his home completely cured. If he continues to lead a regular life at home and avoids any great errors in his diet, he will have no occasion to fear a relapse. I may add a few words on the use of lemon juice in gout. Lemon juice is of unquestionable benefit in this disease, and contributes to the solution of gouty exudations and deposits. But I must emphatically raise a warning voice against the "lemon treatment" so often recommended, according to which the squeezed-out and undiluted juice of upwards of twenty lemons has to be drunk during the day. It is wrong to make such demands on the capacity of any stomach, and I have frequently had opportunities of noticing that even if gout is really expelled by such means it is replaced by severe and often obstinate inflammation of the stomach, in consequence of that organ being overloaded with acid. On the other hand, the juice of two or three lemons, diluted with water and sweetened according to taste, is always well tolerated, and makes a refreshing drink for the patient, besides fulfilling its object as a solvent of gouty deposits when used as an adjunct to the treatment by sunshine, steam, and water.

GOUT AND CHRONIC CATARRH OF THE BLADDER HEALED.

By H. Lahmann, M. D.

A case of chronic catarrh of the bladder and genuine gout, in a man fifty-six years old, came under my treatment on October 25. Gout had existed for eighteen years, originating, as usual, in chronic irregularities

of digestion. The stomach proved, on examination, hard and with its walls thickened, the intestines flaccid, not enlarged, but the reverse, shrunk, in consequence of defective absorption of nourishment. The stools were hard and insufficient. In March, 1886, there had occurred a fresh attack of the gout and violent catarrh of the bladder, concurrent with considerable discharge of pus in the urine. This pus, consisting at times of a third of the urine, was composed, as the microscope showed, exclusively of pus corpuscles, without any perceptible admixture of epithelial cells, or any great quantity of uric acid. Fermenting and disintegrating processes within the bladder were, therefore, pretty well out of the question, and the cause had to be looked for higher up, in the region of the kidneys. There existed, very probably, some inflammatory irritation in the pelvis or kidney, caused by gouty deposits (renal calculus), a presumption favored by repeated weekly appearance of renal colic, accompanied by an aggravation of the patient's low condition of health. The treatment consisted of packs, three times a week, to excite cutaneous activity, which was sadly defective, the skin being completely dry and scaly, and thus to relieve the other organs of secretion. Wet abdominal compresses and T packs were applied for the same purpose. These diaphoretic applications were directed particularly against the gout, the original cause of which, disturbance of digestion, was combated by a modified dry diet, *i. e.*, sufficient and strengthening nourishment, with but little water and by massage. The patient's condition improved visibly, the intervals between the crises were gradually extended from a week to a fortnight, became less painful, and no longer affected his general health. Digestion improved, and, with the dry diet, his weight increased during the first five weeks by three to six pounds. When he was discharged in the sixth week, in the expectation that the treatment would be repeated in the summer, the patient's health was thoroughly satisfactory. There were no pains in the abdomen, the urine was always clear, all bodily functions were in the best order. See also report of cure under "RHEUMATISM."

What result those afflicted with gout or articular rheumatism may expect from medical treatment, may be gathered from the following bona-fide article, which first appeared in the "Tageblatt" of Wiesbaden, and afterwards in several other newspapers.

COMFORT FOR THE GOUTY AND RHEUMATIC. The following faithful report of a consultation, which a Bavarian brewery proprietor lately had with the well-known Prof. *v. N.*, the greatest medical celebrity of the Bavarian capital, may serve as a consolation for the above, liable to be so cruelly reminded of their malady in this wretched weather.

The honest brewer suffers, like so many other admirers of Bavarian beer, from gout during the warm season. He goes, therefore, to Munich

to see Prof. *v. N.* who, by the way, knows him, from having served with him in the army. The following edifying dialogue ensues: "Well, my dear sir, what's the matter with you?" says the professor, a good-natured regular Bavarian.—"Oh, Professor, I've got it in my legs."—"Oh, you've got it in your legs, have you? Now, look here, if you have it right up in the knee, it's the gout, but if you've got it down in your toes, it's podagra." —"Professor, I've got it in the knees."—"Hm, well, just let us see it... yes, that's the gout."—"Well, what's to be done for it?"—"Now, look here, my dear friend, you set your wits to work, and if you find a good remedy, just tell me, and we shall both be millionaires within twelve months."—"Well, and what shall I do meanwhile?"—"Oh, drink as little as possible, and keep your foot as warm as you can and stretched out."—"Thank you, Professor, and what do I owe you?"—"Oh, nothing, my dear fellow, but it's really worth nothing, for it won't do any good."

GOUT IN THE FOOT, OR PODAGRA. For treatment see "GOUT" and the report of cure given below.

CURE OF PODAGRA.

From Dr. KLES' Book, "Dietetic Cures."

Baron *S. K.*, retired major, a corpulent man of upwards of sixty years of age, who had been confined to his invalid chair for years, afflicted with gouty swellings in various parts of his legs and feet, tormented at times by excruciating pains, had for fifteen years been at a number of spas and under a variety of systems of treatment, without experiencing any benefit from them. He commenced with the Natural Method of Healing with the cynicism which so many chronic sufferers use to express their incredulity, *viz.*, "I know it won't do me any good." This treatment effected but little good at first, because the patient did not conscientiously carry out the directions he received. But afterwards it produced such surprising results, as to call forth the unqualified acknowledgments of the patient who, in future, carried out my instructions to the very letter. After having most remarkable urinary discharges, containing more than fifty per cent. of a substance resembling brick dust, the patient recovered completely, and has enjoyed excellent health for years now.

Gout in the Head, see "GOUT."

Graham Bread, see Index.

GRANULATIONS, called also "Proud flesh." These prolific, wart-like formations appear on wounds which are beginning to heal and extend from their edges further and further, till they entirely cover them. These

granulations are also found sometimes in mucous membranes affected with chronic catarrh.

TREATMENT.—They are easily transformed into sound flesh by cool compresses, and, if necessary, by repeatedly syringing with cold, cool, or tepid water. Local cold, cool, or tepid bathing, with plentiful affusions on the affected place, ought also to be employed.

If the inflammation is only slight, the proud flesh may be treated lightly with steam, succeeded by a lukewarm (86°) bath, with affusions on the parts.

Grave's Disease, see "BASEDOW'S DISEASE."

Gray Cataract, see "EYE, DISEASES OF THE."

Gray Hair, see "HAIR TURNING GRAY."

Green Cataract, see "EYE, DISEASES OF THE."

GREEN SICKNESS (Chlorosis). This disease is met with pre-eminently in females at the time of puberty. Owing to defective nutrition of the blood, a diminution of the white and red blood corpuscles (Fig. 29) is brought about; there are more of the white corpuscles than of the red ones in the blood, while the other constituents, albumen and fibrin, exist in their normal proportions. Green sickness seems to be an independent affection of the lymphatic glands and the spleen, and must be distinguished from general poverty of blood, which is also characterized by pallor, as in that of the latter there exists a diminution of albumen and fibrin.

SYMPTOMS.—Pale, wan complexion, changing even to a yellowish, green, or blue hue. This is specially visible in the gums, the lips, and the inner surface of the eyelids; instead of being pink, they are wan and white. There is, moreover, leanness, lassitude, gradual weakness in the legs, palpitation of the heart with the least exertion, a feeling of oppression, indisposition for work, lethargy, aversion to a meat diet, peculiar noises, a wheezing sound in the heart. Pains, moreover, in the head and back, disturbances in the digestive organs, fainting fits, indisposition of the mind, lack of warmth, in particular cold feet. Also cramp in the stomach and constipation manifest themselves, with a longing for indigestible things, such as chalk, slaty earth, coal, or even bricks. The menses are of very watery quality (fluor albus) or the reverse (too great a loss of dark, thick blood); the courses take place irregularly, or do not come at all. The cheeks may have color at times and look healthy.

CAUSES.—Too little bodily exercise, especially being too little in the fresh air, faulty nutrition, *i. e.*, too great a proportion of certain nutritious matters, as albumen, salt, fat, etc.; inattention to cutaneous action;

sedentary occupation; precocious sexual instinct or unnatural indulgence in it (self-abuse); going frequently to balls, theatres, etc.; morbid excitement consequent on reading; great loss of blood through blood-letting; also injuries, hemorrhage from nose, lungs, vagina, etc. The assertion that green sickness is inherited from parents is not borne out by fact. It has repeatedly been found that girls are not afflicted with this disease whose mothers have suffered from it in their time. On the other hand, under certain conditions, such as defective nutrition, bad water, over-exertion, disappointments in love,—girls, whose mothers have been affected with green sickness, are disposed to be victims of the same complaint. If steps are not taken in time to combat this disease, a general wasting-away ensues, or the disease develops into dropsy.

Treatment.—Either every other day a half steam-bath, lasting from twenty to twenty-five minutes, followed by a bath (90°); or else a three-quarter steam-bath in bed with succeeding bath or wet rubbing of the whole body. This somewhat drastic treatment, side by side with which all the other hygienic conditions given below, such as fresh air, etc., must be complied with, should be continued, according to circumstances, for five weeks; we, however, advise its adoption only if the patient can submit to an effective treatment, *i. e.*, if he is not hindered by his business or calling. In the latter case, a repetition of the steam-bath or steam-bath in bed every three or four days had better be resorted to.

Also hand and foot steam-baths are an excellent remedy in green sickness and poverty of blood. If the treatment be supported by massage of the whole body, extraordinarily quick results are gained. If possible, a (81° to 86°) lukewarm, wet rubbing of the whole body daily, or one or two (90°) baths weekly, the latter accompanied also by vigorous rubbing of the skin. A lukewarm (80°) abdominal compress at night.

If the feet are cold, a few foot steam-baths, followed by (70°) tepid, wet rubbing of the legs or feet. Later lukewarm hip-bath. In addition as much fresh, pure mild air as possible, and it is wise to spend the whole day in the open air, or, if the cold is too severe, in a well-aired, moderately warmed room. Sleeping with the window open. Violent or excessive bodily exercise is strictly to be avoided, as is also complete rest; moderate, but constant bodily motion is, therefore, the thing to be aimed at. Diet must be as non-stimulating as possible, avoiding salt and spices, notwithstanding the patient's inclination.

Do not expect any great result from the much-lauded strengthening soups, broths, meats, etc. Drink particularly fresh milk, also raspberry syrup with water. The former, however, always to be taken in moderation and together with bread and other food, such as milk puddings, to digest

it more easily. If the stomach is very weak, eat at first only bread, made of branless wheaten flour, strictly avoiding all strong foods and drinks, though prompted to them by morbid desires. Especially coarse-meal bread (if the stomach will stand it) and fruit. Only occasionally a little roast meat and light wine. See also "DIET, NON-STIMULATING."

Attention must be paid to the skin with great circumspection in bad cases. Begin with warm or lukewarm washings, rubbings, or baths, diminishing the temperature of the water very gradually. Enemata in case of constipation. For obstinate cases see also "COSTIVENESS."

When the general condition has improved, Kneipp half-baths (duration, fifteen seconds) may be taken two or three times a week, also arm and knee affusions. See also: "BLOOD, POVERTY OF," "GREEN SICKNESS," and "WOMEN, DISEASES OF," in Kneipp Cure.

CURE OF GREEN SICKNESS AND ILLNESS THROUGH TAKING MEDICINE.

By Mr. GOTTHART, of Dresden, a Natural Healer.

According to my experience, green sickness is not the same as poverty of blood; I rather hold it to be a stagnation of blood in the capillary vessels of the skin, resulting from an insufficient quantity of water in the plasm of the blood. On this opinion I base my very simple treatment, and have hitherto always been rewarded with complete success. On the 17th of October, Miss *A. N.* of R. was entrusted to me to be treated for green sickness, and five weeks later she was restored to perfect health. On November 27th, of this year, I treated Miss *N. G.*, also of R., for the same illness. She was then bed-ridden, but is now climbing about in the mountains for several hours a day, without feeling any fatigue. My treatment includes slapping soon after rising, together with an invigorating air-bath. For this, the water is taken according to the constitution of from 86° to 90°, and the temperature lowered weekly from 2° to 3°, till a temperature of 72° is reached. At 72°, mild, wet rubbings are begun. In this way I reduce the temperature to 64°, if necessary. Besides this, abdominal compresses at night and non-stimulating diet. After the above favorable results were obtained in such a short time, a young lady, twenty-six years of age, who through her illness had become quite poor, was, introduced to me, and I also undertook her treatment; for eight years and three quarters she had been maltreated by the doctors, and had already one foot in the grave. To-day I received the pleasant news, that after a simple, five days' treatment she enjoyed a seven hours' sleep (without taking morphium), and her appetite has begun to return.

CURE OF GREEN SICKNESS AND INCIPIENT CONSUMPTION.

By the Natural Healer, Mr. HINDORF, of Radebeul.

Miss *J. F.*, eighteen years of age, suffered, according to the diagnosis of a medical practitioner, *A. H.* of S., from green sickness, incipient consumption, and defective menstruation, and her case had been given up as hopeless, because the medicine, prescribed for her, refused to act. I was first introduced to her on February 17th, and on expressing my firm conviction that the sufferer could yet be saved by the Natural Method of Healing, she was brought to me on March 15th, and handed over to my treatment.

Having regard to the gravity of her illness and the inclement season of the year, the treatment adopted was a very mild one. The affected lung received the necessary attention by suitable treatment of the skin. (Every morning sponge bath of 77° and occasionally mild steam-baths.) For the green sickness (caused by defective digestion and nutrition) a simple, mixed diet was ordered, with plenty of coarse wheat-meal bread and fruit. As far as the diseased lung would permit, breathing gymnastics were introduced, whilst the defective menstruation was restored in a few days by lukewarm hip-baths and warm foot-baths, together with stimulating abdominal compresses at night.

The patient had to breathe, of course, pure fresh air day and night, and, as far as her condition allowed, had to take walks and do some gardening. The only beverage allowed was fresh spring-water. Under this simple, natural treatment the condition of the patient improved visibly from day to day, so that the young girl was, within four months, restored to perfect health by means of the natural agents, air, water, diet, exercise, etc. She has now become a fresh and healthy girl, with a color which excites admiration.

Grippe, see "INFLUENZA."

GRIPS, DR. NAEGELI'S (a Special Form of Massage). A Swiss physician, *Otto Naegeli,* M. D., has for several years treated nervous ailments by simple hand-grips, and has thereby not only temporarily alleviated pain, but, by repetitions of the treatment, has worked actual and permanent cures.

Dr. *Naegeli* says in his work "The Therapeutics of Neuralgia and Neurosis" published by *Carl Sallmann,* Basle), that special experiments, instituted by him on all sides, have shown that many cases of derangement in the nervous and circulatory systems will be more quickly and more thoroughly cured by these hand-grips than by any other mode of treat-

ment, to say nothing of treatment by medicine. We, therefore, consider it worth our while to examine the subject closely, and to embody Dr. *Naegeli's* directions in our armory of natural methods of healing.

In doing this, we propose to supplement the details of the processes of manipulation, with quotations of important massages from the Doctor's work above mentioned, which will show the train of thought that led the author to his invention.

In the following pages we shall see, under what circumstances the Naegeli hand-grips may be applied with advantage. First and foremost stands congestion of the brain, which is rather a disturbance of the normal circulation than a nervous ailment; yet the influence of the nerves on the circulation is often so great that such congestion may be said to be at least partly due to a nervous cause. The professional treatment in such cases has hitherto consisted in the application of ice bags to the head, cupping on the nape of the neck, purging of the bowels, and copious blood-letting. More rational than that is the treatment pursued under the Natural Method of Healing, which includes derivative (counter-irritant) packs of the body and calves; hot, or alternate hot and cold baths; walking with bare feet; or local galvanism, for one or two minutes, with a current of one or two thousandths of an ampère, the positive pole being held to the back of the neck, and the negative pole to the forehead. These measures, used either singly or alternately, are actually effectual in curing the ailments referred to above, although relapses and recurrences may be looked for at first.

Dr. *Naegeli* starts with the following thesis:—In congestion of the brain the skull is overcharged with blood, which will flow away more or less rapidly, according as the course of the veins is more or less unimpeded and their fall more or less steep; that is to say, it will flow faster through a straight tube than through one bent in the form of the figure 8, and will also flow faster through a vertical tube than through a horizontal one. Now, the throat is compressed by the superincumbent weight of the head, and the veins in the throat are correspondingly bent. If, therefore, by straightening and stretching the neck we can give the down-flowing blood a steeper fall, we shall facilitate and accelerate its escape, and so relieve the congestion in the most natural way. This consideration led Dr. *Naegeli* to adopt *the head-supporting grip* (Fig. 148), which is practised as follows:—The patient sits in a chair with his back to the operator. The latter takes the head between his hands, placing the balls of the thumbs on the angles of the jaw, where the strongest pressure will be required; the thumbs extend themselves under the ears to the temporal bone behind them; the flat of each hand accommodates itself to the cheeks and tem-

ples; the fingers touch the forehead. The patient should remain quite passive in the hands of the operator, who, by a gentle, even, and firm movement upwards and backwards, raises the head and holds it for one or two minutes in the position, in which the neck is stretched to the utmost. He then, by a similarly gradual movement, restores it to its original position, and draws his hands away uniformly and evenly. Pressure on the veins of the throat and digging the nails into the skin are to be avoided. (Fig. 148.)

The Head-Supporting Grip.



Fig. 148.

The relief afforded by this simple manipulation is usually immediate. In the majority of cases the oppressive symptoms of congestion of the brain disappear during the process, or soon after its completion. A lessening of the pressure and pain in the head, and a consequent feeling of lightness, are experienced, and even the delirium of fever gives way sooner or later.

As to the number of sittings required it can only be said that this must depend on the condition of the patient. In some cases a single sitting will suffice, in others several repetitions of the treatment will be necessary.

In those cases of *migraine*, or megrim (pain confined to one side of the head), which occur with congestion of the brain, or, perhaps, result from it, the *head-supporting grip* is of service; whereas for those which are combined with poverty of blood in the brain, and, perhaps, with sickness and retching, other forms of "grip" must be adopted, of which we will speak later.

Dr. *Naegeli* records in his work a number of interesting cases, from which we select the following:

H. M., a widow, aged forty-five, had suffered for more than twenty years from megrim, which recurred at intervals of from four to six weeks. On the afternoon of the 15th of November, 1889, I found her in great pain, which had lasted since the early morning. On my offering to relieve the pain by the use of my hands she expressed herself very incredulous.

This was a case of plethora of blood to the head. Two applications within a quarter of an hour of the *tongue-bone grip*, followed by the *head-stretching grip*, did away with the megrim thoroughly. Three months later I again saw the patient, who informed me that she had had no return of the malady; whereas, according to her previous experience, she would have expected at least two attacks in that time. She would summon me, she said, immediately on any recurrence of the attack. Accordingly, on the 15th of March, 1890 (four months after the treatment), I was sent for. At the first sitting, eleven o'clock in the forenoon, the former treatment, tongue-bone grip, followed by the head-stretching grip, was absolutely successful. On my paying a visit of inquiry in the evening, the lady informed me that she had not had a sign of pain, although she had been engaged in work of an exciting kind. As a measure of precaution, I repeated the treatment.

A second case is as follows:

Mrs. *I. C. von B.*, a widow, aged forty-seven, had for a long time suffered from megrim and other complaints. She stated at the outset that she was known among the doctors of her native town as an instance of the most severe form of neuro-paralytic megrim. She remained in my house for treatment during three months. In light attacks, and when I could be promptly on the spot, it was my good fortune on every such occasion to banish the pain with a single application of the tongue-bone grip and head-stretching grip; indeed, the patient declared that the pain was relieved after a minute of that treatment. Sometimes the pain returned within half an hour, but only to disappear again instantly on the renewal of the grips. The severe attacks, which generally began at two o'clock at night, defied the measures which I had therefore adopted.

The *head-stretching grip* (Fig. 149) is similar to the head-supporting grip, but more energetic in its effect. It is, therefore, frequently employed when the latter fails to cure. The process is as follows:

The operator, standing in front of the patient, lays both thumbs along the horizontal part of the jaws of the latter, and rests the outer edges of the hands on his shoulders near the throat. The first finger of each hand

The Head-Stretching Grip



Fig. 149

is brought up in front of the ears, and the other fingers encircle the neck. The patient's head is now gently raised and laid back (Fig. 149). The veins of the throat are thereby still more lengthened and stretched than in the head-supporting grip, and are visibly emptied during the process; so much so that the face of the patient will become pale. The effect of this grip declares itself, therefore, in the more rapid withdrawal of blood from the head and brain.

In many cases, indeed, slight giddiness, a feeling of drowsiness, or even insensibility—all of which are signs of want of blood in the brain—occur; and further experiments will determine, whether we have not in

this grip a valuable remedy for insomnia. Also in cases of pain in the chief sensory nerve of the face *(trigeminus)* this head-stretching grip has a very beneficial effect, particularly in that very severe form of neuralgia, *tic douloureux*, and in cases of tooth-ache, which are not attributable to decay of the teeth. In all such instances the soothing effect of this grip will be found in the gentle stretching of the nerves implicated; a treatment formerly employed with advantage in various forms of neuralgic pain, particularly in the acute burning and shooting pains in the legs, which are premonitory of paralysis.

Dr. *Naegeli* further recommends, in cases of face-ache, the rubbing and stretching of the skin with the fingers, during the grip, over the seat of the pain. By this means not only the more superficial, but also the deeper-seated nerves will be stretched, and the soothing effect considerably enhanced.

Of the results obtained, by this method of treating face-ache, Dr. *Naegeli* writes as follows:

In January, 1890, a man and his wife, aged respectively twenty-nine and twenty-six years, came together to me, suffering from face-ache after influenza. The violent pain was promptly removed, in both cases and upon every occasion, by mechanical treatment alone, without antipyrine or phenacetine; and in three sittings a complete cure was effected.

A peasant woman, sixty years of age, sought help from me in February, 1890, for neuralgia under the eyes (pain in the infra-orbital nerve), which had been very violent for three days. On the sixteenth of that month I treated her three times. The pain ceased, and did not return until early on the morning of the eighteenth, when, after two more applications of the grip at one sitting, she was again relieved from pain and permanently cured.

I cannot admit the force of the objection that all these persons might have recovered in the same time, without any treatment at all. Relief came so quickly that it was evident the pain began to yield at the first touch, and that rest and chance of cure were thus afforded to the suffering nerve.

How different the position of the practitioner who can relieve a patient in a moment from the most violent pain by skilful manipulation, when compared to that of the hero of recipes with his pen!

Of precisely opposite action to the head-supporting and head-stretching grips, is the *neck grip* (Fig. 150). It is carried out as follows:—The patient is seated with his back to the operator, who, taking the head be-

tween his hands, as in the supporting grip, bends it forwards and downwards as much as possible; and then, resting his forearms on the patient's shoulders, draws out and thoroughly stretches the latter's neck; yet not so, as to cause him pain. While the object and effect of the supporting grip are to facilitate the flow of blood from the head, the neck grip increases the flow to the brain, without checking the return stream. The arteries in the neck have now a horizontal, if not a falling, course in conveying the blood to the head, instead of having to force it upwards against gravity; thus the distribution of the supply of blood to the head is rendered more easy, while the simultaneous stretching of the throat prevents—though from the position of the patient's head in the illustration it might seem to be otherwise—the compression of the veins, through which the blood returns downwards, and a consequent damming-back of the circulation.

The Neck Grip.



Fig. 150.

The neck grip effects, therefore, a more rapid distribution of arterial blood to the brain, without causing any stoppage in the veins; and it may be employed with advantage in all cases, in which the ailments to be dealt with are due to want of blood in the brain. To this class belong giddiness, loss of the senses, certain forms of chronic headache, and those cases of megrim which are caused by contraction of the blood vessels of the brain, and its consequent emptiness of blood. The grip is to be recommended in all such cases, and not for one application only; but, even when the patient has been freed from pain and discomfort, and feels quite well, the process should be repeated after the lapse of a quarter of an hour from the first handling. There will then be a greater security against any return of the ailment. Regulation of the circulation in the head may on the one hand be the cause of such improvements; on the other hand, the stretching of the neck, which is the action of the grip, will certainly produce a favorable change in the condition of the *vaso-motor nerves*, which are here in question, and thus a gradual improvement in the circulation will be brought about.

As a remedy for the inclination to vomit and retching, Dr. *Naegeli* employs another "grip," which he calls the *tongue-bone grip*, and which

implies the raising of the *hyoid* bone. The operator in this case places himself, sitting or standing, face to face with the patient. He then, with the under-surface of the tops of his thumbs, feels his way from the larynx upwards, until he comes upon the greater horns of the tongue-bone (which will be found just above the larynx). He should satisfy himself that he has the right bone by a few oscillations of the thumb upon it.

After passing the thumbs along the course of the bone (which is U-shaped) about half their own length, so that both thumbs together feel

Tongue-Bone Grip



Fig. 151.

it all round, he then raises it gently and lightly, yet energetically, avoiding pressure on the spinal column. The fingers either follow the upward curve of the under-jaw bone and rest on the temples, or they support themselves on the shoulders of the patient, or the first and second fingers hook themselves into his ears. The object of this is to render the "grip" less fatiguing to the operator. The tongue bone may now be raised from five to ten minutes, according as it moves with ease or with difficulty (Fig. 152). The duration of the grip should be from a minute to a minute and a half, unless the patient sooner announces that the inclination to vomit has ceased. If circumstances require that the grip should be applied from behind the patient, this can be done. The thumbs are placed

under the tongue bone, as before; the rest of the fingers close on the ears, the forearms supporting themselves on the patient's shoulders. The tongue bone is moved upwards, as above (Fig. 153).

Occasionally it is not altogether easy to find the tongue bone, especially in fleshy throats. An inexperienced operator may easily mistake the projection of the thyroid cartilage (Adam's apple) for it. But if, with careful touch, he follows the windpipe upwards on both sides (beginning

Tongue-Bone Grip.



Fig. 152.

below the projecting "Adam's apple"), he cannot mistake the larynx; and the tongue bone lies horizontally immediately above it. The physiological effect of the tongue-bone grip is, that, first, the epiglottis, which closes the windpipe, is raised, and air is so admitted to the lungs, instead of its being swallowed, as is generally the consequence of an inclination to vomit. Next, the grip causes the ***nervus vagus*** (pneumo-gastric nerve)—which is connected with the lungs, liver, heart, and stomach—to be stretched, and the metamorphosing effect on a suffering nerve, which such a stretching can exert, has already been spoken of.

We come now to the point of answering the question, in what cases the ***tongue-bone grip*** is to be employed. It should be borne in mind that vomiting is, in many cases, a natural curative effect of the system to rid

itself of matter either injurious or excessive in quantity. If, therefore, a professional man is called in to assist a patient who has overloaded his stomach with food or drink, and who feels an inclination to vomit, it would be directly opposed to nature and reason, if the former were to resort to the tongue-bone grip, in order to get rid of that salutary inclination on the part of the latter. On the contrary, the only "grip," which would be appropriate here, would be the insertion of his fingers into the throat of the patient, in order to encourage the tendency to vomit, and so to bring about the desired relief as speedily as possible. The same process is, of course, in order when noxious matter, unsound food, poison, or the like has been introduced into the system.

Tongue-Bone Grip.



Fig. 153.

There are, however, a great number of cases in which the tongue-bone grip is called for. Generally speaking, it will be right to apply it in all cases where the retching, or disposition to vomit, proceeds from a nervous cause. Hysterical retching, for instance, offers a favorable field for treatment in this manner. Considering that the whole nervous system of a hysterical subject is less capable than that of a healthy one of resisting injurious influences, and is susceptible to causes of irritation, which would not have the slightest effect on sound nerves, it is not a matter for surprise that the sensation of sickness should be aroused in such subjects by comparatively slight causes. A bad smell, the sight of food which they do not like, or even only the thought of it, suffices to turn them sick. In all such cases the tongue-bone grip is the right remedy.

It will not only promptly subdue the inclination to vomit at the time, but, if repeatedly and systematically employed, it will entirely remove the ailment. Dr. *Naegeli* reports as follows, in his work, on the results obtained:

G. H., an extremely delicate, nervous, young lady, twenty-three years of age, who suffered periodically from such violent fits of sickness that she

could not swallow a spoonful of food without immediately bringing it up again. Even after each application of the tongue-bone grip the sickness returned immediately. I fought it, however, so persistently, as to win morsel after morsel, ever and again mastering the inclination to vomit; and even when the act commenced, I put a summary stop to it, not allowing it to complete itself. Thus the object was gradually attained of accustoming the stomach to take food; the vomiting became less frequent, and nutrition improved; the patient gained eight pounds in weight, and returned to her home much improved in health. She practises the tongue-bone grip on herself. The latest report, in the spring of 1893, is to the effect that her state of health varies; the sickness seldom troubles her; she is engaged to be married.

B. H., twenty-three years of age, nervous, hysterical, and of a gloomy disposition, has for the past six weeks brought up almost all the food she has eaten. She generally has to leave the table after the first spoonful of soup, in order to relieve herself of it. She proved a somewhat difficult case, exhibiting such violent choking (or retching) fits that the tongue-bone grip had to be applied with the utmost energy. The food often returned as far as the top of the gullet, but was not allowed to escape; in spite of the entreaties of the patient that it might be given free passage, it had to resume its downward course. By degrees the inclination to sickness was felt at greater intervals; the emaciated patient gained considerably in flesh and weight, has since become quite well, and is happily married.

The sickness incidental to pregnancy can also be, to a considerable extent, relieved by the tongue-bone grip. Hitherto women have thought that there was no cure for this trying, but in their condition natural and inevitable, trouble, and have only sought medical help in most rare cases, when the sickness was prolonged and threatened to exhaust the strength. Unfortunately, that help has mostly consisted in narcotics, which, although temporarily palliative, have not failed, when their use is long continued, to exercise a baneful influence on the nervous system of the mother, and on her embryo offspring. Dr. *Naegeli* has now proved that this sickness also can be counteracted in a natural way by the tongue-bone grip; and not only for the moment, but permanently, if the treatment be persevered with. It is, indeed, to be wished that the efficacy of the tongue-bone grip could be universally known, in order that poor pregnant women, who have already so much to suffer and to endure, might at least have at hand this means of alleviating their burden.

Two purely nervous or neuro-hysterical maladies remain to be described, in which the tongue-bone grip will be found of excellent service.

In the first of these the patients have the sensation of a ball moving up and down in the gullet, from the stomach. As the starting point of this peculiar sensation is the stomach, it is reasonable to suppose that its cause was to be sought in the chief nerve of the stomach, the ***vagus,*** above referred to. The tongue-bone grip was tried experimentally, and with the best results. Two, three, or four sittings usually sufficed to put an end altogether to the sensation of the up and down moving ball. The second of the two maladies, which may also be successfully treated with the tongue-bone grip, is ***nervous loss of speech.*** Persons, apparently healthy and strong, have been known suddenly to lose the faculty of ***modulated utterance,*** as the result of a shock, of anger, or excitement. This condition may disappear in a few minutes or hours, or it may be lost for days, weeks, months, or even years. Electric treatment and hypnosis have frequently been brought to bear on such cases with success. Dr. ***Naegeli*** has attained equally favorable results with his tongue-bone grip, which has the merit of greater simplicity and facility of application, as compared with those methods.

The Stomach Grip.



Fig. 154.

Stomach pains, in their ***most severe form*** of colic, may be called a veritable plague for patient and practitioner. To be sure, the allopath masters such pains at once. A drop or two of morphia injected —and both pains and patient are quieted. But for how long? Just so long, as the influence of the morphia lasts. When this passes off, the pain is again felt, and the patient is only too ready to have recourse again and again to the wonder-working syringe, until, at length, he falls a victim to the drug, and all too late curses himself and the obliging doctor who first urged the employment of the syringe.

The combined natural method of cure is quite capable of dislodging stomach pains, without the help of narcotics. A steam jet, or steam compresses on the stomach, soothing abdominal packs, or a constant electric current, will generally cure such pains to whatever category they may belong. Dr. ***Naegeli*** has suggested for these pains also a special and very effectual hand-grip to which at all events the merit of simplicity must be ascribed. It is based upon his observation of the fact that people experience relief from pains in the stomach by pressing upon it with their fists, or by

pressing it against the back of an arm-chair, or the edge of a table, etc. Upon that observation Dr. *Naegeli* constructed the theory of his ***stomach grip***, which is carried out as follows:

The operator places himself behind the patient (who is undressed down to the waist) and clasps him with both arms round the body; laying four fingers of each hand close together, on the pit of the stomach, so that the tips of the fingers meet in the middle. He then with energetic and deep pressure with the fingers draws and stretches the pit of the stomach. (Fig. 154.) Quite gradually the fingers extend their opera-

The Tent Grip.

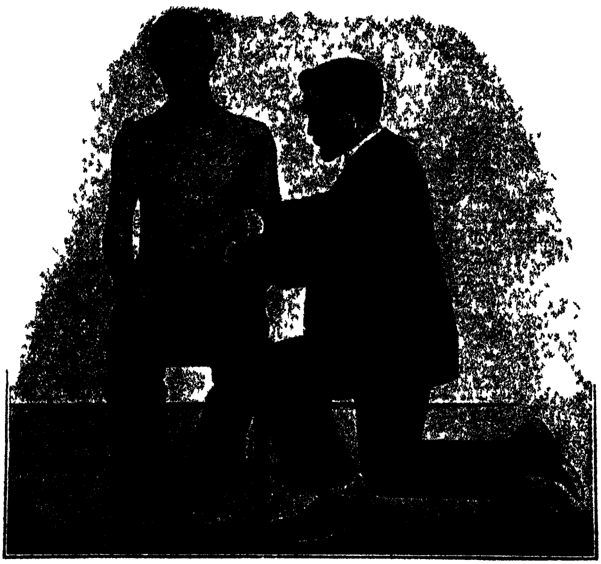


Fig. 155.

tions to the arch of the ribs. This grip must be kept up longer than those described previously, and if continued for two or three minutes, as it should be, it will make a considerable demand on the strength of the operator. If he cannot keep it up with equal energy for that time, he had better reduce the pressure by degrees and make a short pause to rest his muscles. He may then complete the process, until it has lasted all the required number of minutes. Sometimes the pain is relieved during the grip, sometimes not till after its conclusion. In the rare cases in which a favorable result is not at once obtained, it is desirable to follow on with another grip, the stretching effect of which is exerted in the

direction of the long axis of the body (at right angles, therefore to that of the "stomach grip"). This is called the ***tent grip*** and is thus performed: The hands, with the fingers extended and closed, are placed together so that their inner surfaces touch, and the thumbs cross each other. The hands are then opened (tent fashion) and the little finger edges laid on the pit of the stomach, a hand's-breadth or more apart, above and below the waist line. Pressure is then exerted with the edges of the hands, alternately drawn together and spread apart. (Figure 155.

The Whooping-cough Grip.



Fig. 156.

This grip will often remove every vestige of pain.

It will be necessary to repeat these various grips once or oftener, according to the complaints, its description and duration, and it must here be remarked that it is not alone in stomach pains which have a nervous origin, or those which arise from irregularities of diet, that the grips are of service. Dr. *Naegeli* declares that they have brought about at least alleviation and mitigation of pain in cases of serious organic stomach complaints, such as tumor and even cancer. From the many examples given by Dr. *Naegeli* in his work, we select the following:

B. M., thirty years of age, suffered much and often from spasms on the stomach, although she had otherwise nothing to complain of. She stated that all the medical men who had treated her had been obliged to use morphia, which had been the only effective remedy. The pain had lasted for hours, and sometimes days. When she had occasion to send for a doctor on the night of the 10th of May, 1892, she had therefore requested him to bring the injection of a syringe. On my arrival I found the patient writhing in agony. I raised her to a sitting posture in the bed, and carried out the "stomach grip," in the manner above described. In three minutes there was a considerable diminution of the pain, and after ten minutes, in the course of which the treatment had been twice

repeated, the spasms were overcome. They have not occurred since. The patient has continued to be free from the complaint to this day.

S. I., a girl of eighteen, somewhat anæmic, has suffered from spasms in the stomach at short intervals throughout the whole of last year. A particularly violent attack occurred on the 20th of April, 1893. Treated by me at once with the "stomach grip" she was entirely freed from pain and sickness in two minutes.

A serious malady is whooping-cough. Whoever has had experience of it, whether in his own person or through others, knows how not only

The Whooping-cough Grip.



Fig. 157.

the patient but those about him suffer during the distressing fits of coughing. Dr. *Naegeli* has suggested for this disease also a special grip, which almost instantaneously stops the gasping; and, if frequently repeated, shortens the course of the illness. The *"whooping-cough grip"* is thus carried out:

The operator stands, or kneels, in front of the child, grips the lower jaw firmly—the first and middle finger of each hand being on the rising part of the jaw-bone in front of each ear, and the points of the thumbs on the chin. In this manner he moves the patient's lower jaw firmly, but gently, forwards and downwards by a combined pull and push action

(Fig. 156). If the child's mouth is already open, as is always the case during the coughing fit, he at once hooks the thumb of one hand into the mouth behind the under teeth, grips the chin with the fingers of the same hand underneath, and gently forces the lower jaw forwards and downwards; the other hand resting on the child's head, and bringing a counter-pressure to bear (Fig. 157). It stands to reason that there must be no pressure on the teeth; it should be exerted on the under jaw alone. The latter of these two whooping-cough grips is to be preferred to the former, on account of its greater simplicity. The effect of the whooping-cough grip evinces itself in two ways; by the mechanical unlocking of the cramped muscles of the throat, and by the opening of the epiglottis and separation of the vocal chords, which are consequent upon the raising of the larynx and tongue bone.

The Whooping-cough Grip from behind.



Fig. 158.

The third whooping-cough grip is given from behind. Dr. *Naegeli* thus describes it:

The patient being turned with his back directly towards me, I place my two thumbs in front of each ear, immediately above the angle of the jaw, and my first and second finger of each hand on the chin. I then push the under jaw forwards and downwards. As soon as the jaw is raised again, the patient is told to draw a deep breath; and if this can be done, the attack is usually at an end for that time.

Dr. *Naegeli* remarks in his work, with reference to these whooping-cough grips, that they are so simple and so easy of execution, that every intelligent mother or nurse, or even the elder brothers and sisters of little sufferers, may practise them with success. They are, besides, absolutely painless and harmless; and on that account sensible and well brought-up children do not set themselves against them; but, once they have experienced the delightful results of the grips, they run to be handled directly they feel the cough coming on—indeed, they often try to do the handling for themselves.

The good will, or perfect submission, of the child patient is absolutely necessary for the performance of these grips; they cannot be employed

if the child is foolish enough to resist. Dr. *Naegeli* lays great stress on the expediency of parents and others learning and practising the grips, as children naturally like being handled by their own kith and kin rather than by a stranger, whether a doctor or not, and he advises careful and intelligent heads of families, when an epidemic of whooping cough threatens, to accustom their children beforehand to the hand grip. Professor *Hagenback-Burkhardt* in Basel wrote to Dr. *Naegeli* that, in the Children's General Hospital there, excellent results had been obtained from these hand grips, and that the cases in which they had not proved effectual were those in which the operations had been necessarily left in the hands of relatives of the patients, or of nurses, in consequence of his own and his assistants' inability to attend to them. In conclusion Dr. *Naegeli* says that, in his own hundred-fold experience failures have only occurred when it has been impossible to apply the grips correctly, owing to opposition on the part of children, or to want of energy on the part of operators. Statements to the same effect are made by many parents.

The series of Naegeli hand grips, or, at least, the most important among them, might end here, but one more must be mentioned. As the remedy recommended for pain in the nerves lying near the surface or skin nerves is the stretching of the skin where the pain is felt, so also in cases of pain in the more important and deeper seated nerves Dr. *Naegeli* advises the stretching of the nerves themselves and of the muscles which surround them. The method of doing this is simple. The painful limb is clasped above and below the seat of the pain, and a strong drawing pressure is exerted in opposite directions. If the limb is too large to be clasped, or if the seat of the pain is in the body, the points of the fourth fingers of both hands are placed above and below it, and drawn apart with a strong, deep pressure—the backs of the hands being towards each other, and the movement of each in a direction opposite to that of the other. By such simple manipulation the most violent neuralgic pains in the arms and legs, even the dreaded sciatica, as well as pain in the nerves connected with the ribs, in the breasts of women, and in the sexual parts, have been very successfully treated.

It is, of course, possible that, as is usual with all new curative remedies and methods, persons dazzled by a series of brilliant results, achieved by the Naegeli hand grips, may build upon them hopes which are not afterwards realized. Great enthusiasm is, in such cases, succeeded by disappointment. That it should be so, is a pity. The Naegeli hand grips do not profess to be, and cannot be, a universal remedy. That should be clearly kept in view, as should also the consideration that not only is technical skill, which practice alone can give, essential to success with the method, but that the method itself is still in its infancy and capable of greater ex-

pansion and perfection. We must, nevertheless, acknowledge that Dr. *Naegeli* has placed in our hands a method of treatment, suggested by sagacious observation and constructed in correct anatomical and physiological conditions; and that thanks to it we are enabled to cure, or, at least, alleviate, in a thoroughly natural way and with the simplest means, a number of disorders of the nervous and circulatory systems, and the pain which attends them. We do not hesitate, therefore, to include the Naegeli hand grips among the factors of the Natural Method of Healing.

Gumboil, see "KNEIPP CURE."

Gum, Fistula of the. See "FISTULA."

GUMS, FUNGUS ON THE. This is a hard, broad, bulbous growth; red or reddish blue in appearance; covering several teeth, upon which it presses so that they are gradually loosened and ultimately fall out. In extremely bad cases even the cheek bones can be displaced, the nose pressed out of place, and the orbital and oral cavities reduced in size.

TREATMENT.—Take mouth baths as frequently as possible; massage, stroke, and press the gums, particularly the growth.

Three times a week a steam-bath in bed should be taken, and an abdominal pack applied at night. In severe cases an operation may also become necessary. For Modes of Application see Index.

GUMS, INFLAMMATION, DISEASES, AND SWELLING OF THE, occurs with various complaints and diseases, such as scurvy, salivation, especially after the use of mercury, and similar maladies, besides cancrum oris, stomatitis, toothache resulting from diseased or carious teeth.

TREATMENT.—The treatment in the first place should be directed against the original disease. For the rest, frequent rinsing of the mouth, in order to get rid of the disagreeable smell, and to strengthen the gums, as well as to mitigate and remove their inflammatory condition. If necessary, a few steam-baths in bed to be applied. If carious teeth are the cause of the gums being affected, they should be removed. Non-stimulating, cool diet. See also under "CANCRUM ORIS."

For Modes of Application see Index.

Gut, see "INTESTINES."

GYMNASTICS AND MUSCLE EXERCISES OF ALL KINDS. Gymnastics are a methodical cultivation of the whole voluntary muscular system, which promotes health, strength, and agility. They are particularly necessary for people whose mode of life is sedentary.

It is a great blessing that in recent times gymnastics have been added to the time tables of primary schools; they are among the surest preventives

CURATIVE GYMNASTICS.



Fig 1. Forward Body Movement.

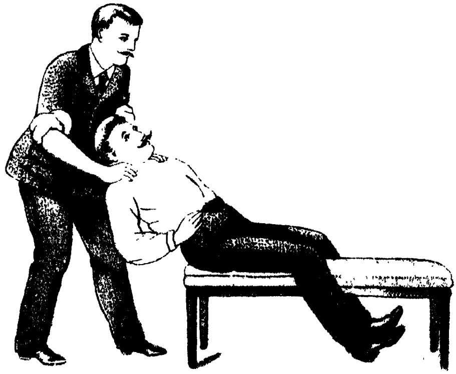


Fig. 2. Backward Body Movement.

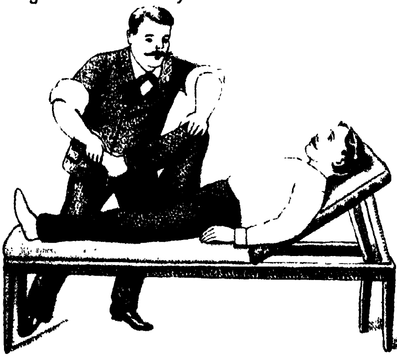


Fig. 3. Thigh bending Movement.

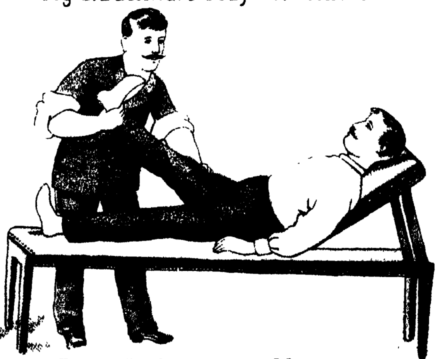


Fig 4 Thigh extension Movement.

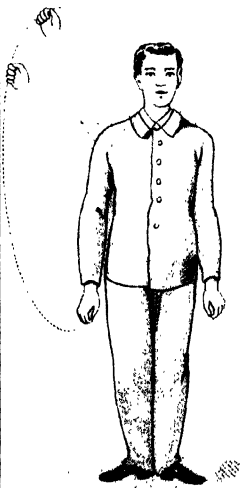


Fig. 5. Rotary Arm Movement.

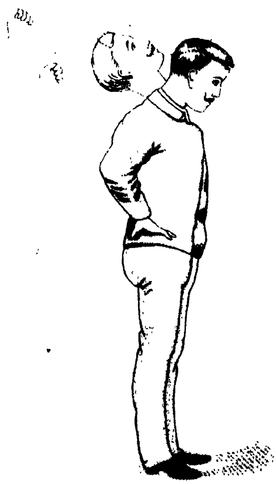


Fig. 6. Rotary Head Movement.

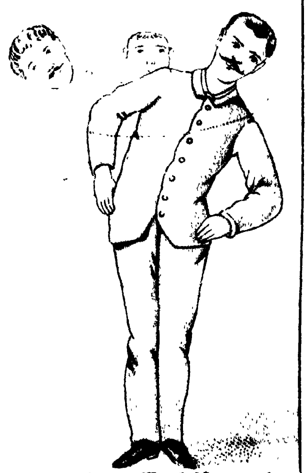


Fig. 7. Rotary Trunk Movement.

EXPLANATION OF PLATE "HYGIENIC GYMNASTICS.'

Hygienic gymnastics are used in diseased conditions where there are no fevers, whose origin can be accounted for either through insufficient bodily exercise or through muscle weakness, extension of the muscles, excretion of exudates (in the joints, etc.). They have a stimulating and accelerating action on the metabolic processes, strengthen the muscles and quicken the circulation of the blood. For abdominal affections in women, bendings, displacements, sinkings, etc., the movement cure (especially when executed according to Thure-Brandt) is very salutary, and we have often succeeded, by appropriately using it, avoiding serious operations. Further explanations concerning the value and application of hygienic gymnastics on pages 534 to 566.

FIGURES 1 and 2. **BENDING THE BODY FORWARD AND BACKWARD** (Position 1 and 2) can be executed with or without resistance from the patient, according to desire, 10 to 20 times daily, or it can even be done alone without outward aid in a sitting or standing position. This exercise has a beneficial action in cases of hypochondria, pollution, constipation, digestive weakness, hæmorrhoidal complaints, rheumatism of the back muscles, etc.

FIGURES 3 and *4*. Flexion and Extension of the thigh is used against rheumatic and gouty exudates in the knee-joint, chronic inflammation of the hip-joint, ischias, paralysis of the legs after apoplexy, diseases of the spinal cord, etc. It is also effective in chronic abdominal diseases of women where old exudates are to be brought into solution; it should, however, be executed only by an experienced hand.

FIGURE 5. **CIRCLING THE ARMS.** The further description of its execution will be found on page 545. This exercise is used in cases of congestion toward the head, narrow build of the thorax, to promote deep breathing, in the early stages of consumption, asthma, pollution, etc.

FIGURE 6. **CIRCLING THE HEAD** is used against stiffness of the neck, nervous giddiness, congestion of the head, etc. More details on page 552.

FIGURE 7. **CIRCLING OF THE TRUNK** is used in the diseases mentioned under Figs. 1 and 2. Further details on page 553.

of the harm which school work, with its long hours of sitting on narrow, often ill-constructed, benches, and in imperfectly ventilated rooms, may entail.

The long school course, with its overweight of mental work, is for many the source of future sickness and suffering, which systematic gymnastics will ward off.

By the practice of them the unused muscles will be brought into play and strengthened; the lungs will breathe fully and freely, and rid themselves of the noxious substances inhaled in the close school rooms.

A horizontal bar fixed in a doorway.

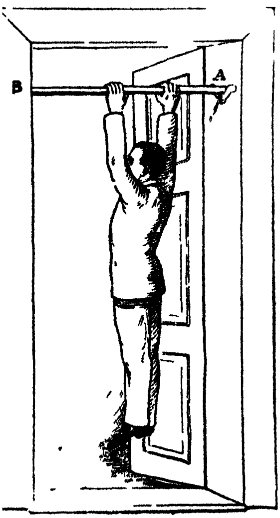


Fig. 159.

In order to make the bar useful for taller and shorter persons, it might be as well to fix a second bar breast high. A much greater number of exercises will then be possible; as they are carried out in many gymnastic societies.

I will here quote, from the "Methods of Practice," by *Siegert* and *Canitz*, a few general hints on gymnastics and muscle exercises, as to the means, hours, and methods of their performance at home.

They should be gone through, if not in the open air, with open windows, in loose clothing, without braces, and not before two hours elapsed since the meal, but never after supper. The exercises should be taken in such order that first the arms, then the trunk, and lastly the legs, are brought into activity; and after each exercise there should be a pause, during which eight or ten deep breaths are taken at the open window. For example: Raise the arms sideways ten times (to the level of the shoulders, or higher); bend the body forwards five times (as low as the waist, or lower); bend the knees ten times (without altering the pose of the body). Pause—ten deep breaths, throw the arms back (in line with shoulders) ten times; draw the knee up to the body ten times; ten deep breaths, and so on.

Each exercise is to be repeated at first from five to ten times; later, from twenty to thirty times. Neither gymnastics nor walks are to be carried on to the extent of causing fatigue.

Excellent though gymnastics are as a means of preventing disease, and of removing or assisting the cure of certain (chronic) symptoms, the active exercises are not suited to every patient or to every ailment. Sometimes the nature of the latter forbids them; sometimes they would make

a greater demand on the bodily strength and the nerves of the patient than could be met. The passive muscular movements, on the other hand, provided in the special curative gymnastics, or actuated by massage, through the exertion of another person, demand hardly any strength of muscles, and a mere minimum of nerve power, so that they are practicable for the most weakly patients and even for the smallest children.

Hand rings fixed to the ceiling.

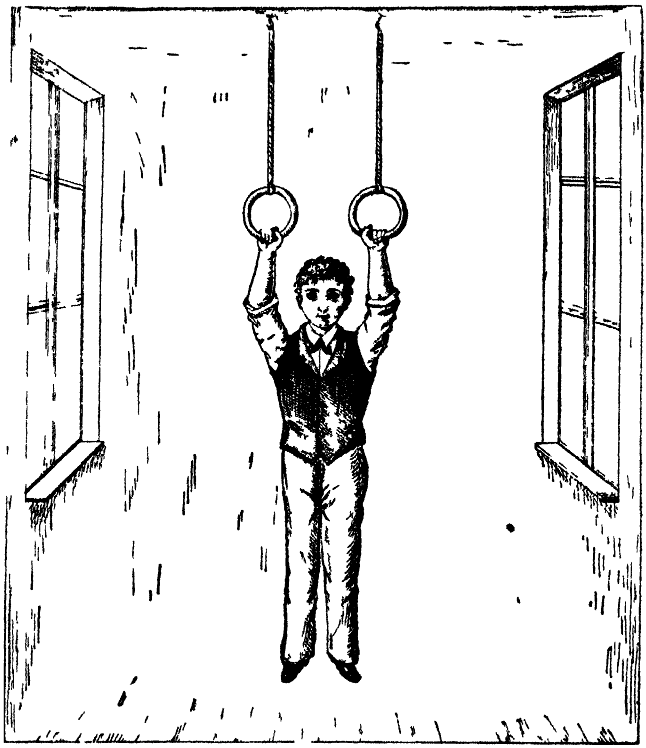


Fig. 160.

Be it here remarked that want of exercise implies insufficient formation of blood, unhealthy condition of the blood, and irregular distribution of it; furthermore, want of appetite, weak digestion, constipation, and disorders of the liver, etc.; while, on the contrary, gymnastic movements result in a full supply of sound constituents in the blood, and its uninterrupted circulation; in a word, normal and constant assimilation, and, therefore, due nourishment to the body and its organs—outwardly evident in hard muscles, healthy color, and good spirits.

Gymnastics at Home. That gymnastics are zealously promoted by associations is very satisfactory. It is not my intention to describe here the various exercises with horizontal and parallel bars, rings, etc., which such societies promote. I propose only to give a hint as to the way in which a useful apparatus for children may easily be put up in a room.

1. A horizontal bar fixed in a doorway.

2. Hand rings (Fig. 160). These are two large rings of wood, or of iron covered with leather; each fixed to a strap, or strong cord (inch and a half thick rope), which may be lengthened or shortened at pleasure. The ropes or straps hang each from a strong hook, or screw eye (ring-bolt), screwed into a beam or joist in the floor above, about the width of the shoulders apart.

On the above two sets of apparatus children can perfom a great number of the various exercises

GYMNASTICS, CURATIVE. Gymnastics at home—also called active, as distinguished from passive, movements of the muscles.

Our entire organic life depends on the process of assimilation, which can only be maintained in a normal state by the exercise of every part of the body. The more we stimulate this process by bodily exercise, the more will our life gain in freshness, strength, and endurance; and the better we shall be able to ward off bad health and disease, and to overcome them if they attack us.

If the process of assimilation is imperfect—in other words, where there exists congestion of blood and of the substances of the body, a state of things usually resulting from insufficient bodily exercise—our first task must be to further the assimilating process in the whole system, or, as the case may be, in single parts of the body, and to restore it to its normal condition, in order to bring about the excretion of morbid refuse matter, which has remained behind in the system, and to give new energy to all the organs of the body. In the attainment of this end, curative gymnastics play an important part, because they incite the various muscles to general and many-sided activity, the want of which results in obstruction of the process of assimilation—in a word, in ill health.

Another fruitful source of ill health is the neglect of vigorous respiration, which is the natural consequence of insufficient bodily exercise. It is only by deep breathing that good and richly oxygenated blood can be formed. A person, therefore, who is obliged to spend his time sitting or standing, should not neglect to practise regular gymnastic exercises.

Too much sitting, which fails to give the abdominal muscles the opportunity of exercising their functions, leads to disturbance of digestion, gastric weakness, constipation, defective formation of blood, congestion

of the liver and spleen (the whole system belonging to the portal vein), the consequences of which are, in their turn, chlorosis, anæmia, nervousness, chronic headache, vertigo, hypochondria, hysteria, melancholy, scrofula, etc.

Although the disadvantages of insufficient bodily exercise may not be apparent during the prime of life, the evil consequences are sure to be felt in after years. We are then threatened with a whole host of chronic complaints, such as piles, gout, asthma, congestion, abdominal complaints, paralysis, hysteria, hypochondria, melancholia, fluor albus, as well as the diseases named in the foregoing paragraph, and, besides, stiff limbs and bodily deformity.

It need hardly be mentioned that it is absolutely necessary that attention to the skin should go hand in hand with gymnastic exercises of every kind, if we wish to guard against illness.

How many thousands of ladies there are in the higher grades of society who, without being perhaps seriously ill, are nearly always ailing and out of health, and who would be well if they were to take regular exercise, practise curative gymnastics every day, and pay proper attention to the skin.

Curative gymnastics, also called room gymnastics, are of special value, because they may be easily performed anywhere—in the room before an open window, in the garden, or during a walk in some sequestered spot, or while travelling, and because they need no assistance from other persons.

By the practice of curative gymnastics, not only are diseases warded off, as has been mentioned, but they can be cured, as the name "curative gymnastics" implies. The principles and methods, upon and by which the gymnastics should be applied in various diseases, are indicated in a general manner in the articles treating of the diseases. In the first place I would draw attention to the following observations on curative gymnastics:

REMARKS ON CURATIVE GYMNASTICS. I have kept in the main to Dr. *S. Schreiber's* "Room Gymnastics," a book which is to be highly recommended.

1. Be it expressly observed that, in the application of curative gymnastics, as in any other treatment, it is of vital importance that the means employed should exactly correspond with the circumstances of each individual case (*i. e.*, in treating a patient, regard must be had to the existing reserve of vital force). This, however, can only be judged by a professional man. See the heading "INDIVIDUAL."

2. The gymnastics must not be applied in serious cases, where inflammatory and feverish conditions exist; nor should pregnant persons have recourse to any exhaustive form of curative gymnastics, but they should restrict themselves to very gentle movements, such as taking walks, etc.

Patients suffering from abdominal hernia must take great care, when practising movements which bring the abdominal muscles into play, that their truss keeps the hernia completely under control.

3. The movements must be executed calmly and without hurry, but energetically, and with full exertion of the muscles; as much as possible in accordance with the illustration and description given; if they cannot all be successfully performed at once, they will, by practice, become easy of accomplishment. If, however, by reason of some physical peculiarity, the patient is unable to perform a movement, let him omit it for the time, rather than make violent efforts to perform it. The body may, by practice, become capable of performing it with ease; it is surprising, indeed, what progress even elderly persons can make in this respect.

4. It is always advisable to take the easier exercises in hand first, and, by degrees, to advance to the more difficult ones. We must here remind the reader, once more, always to adapt the duration and number of the different exercises to his strength and bodily condition. He may always consider the feeling of fatigue or pain as an indication that it is time to stop; and that hint must never be disregarded. Two things must be kept in view, in connection with these exercises:—(a) The patient must feel completely rested, before going on again with a fresh exercise, and (b) There should be no sharp muscular pain after the completion of the practice.

Beginners, in particular, should never lose sight of these two conditions; if, notwithstanding the greatest prudence and the gentlest movements, considerable muscular pain makes its appearance, a pause must be made until the pain has subsided, and then some quite gentle and easy exercise only should be taken.

5. Although a patient's performance may be very poor at first, he will be able in a short time, as soon as he is used to the movements, to perform two or three times as much, and even more; and to stand it better than when he began. Should the exercises even cause him some trouble and pain at the outset, he must not, at once, run away, with the idea that he cannot master them, or that they are beyond his strength, but he must quietly continue with them, always having regard to the limits imposed by his constitutional powers.

6. The best time to perform the exercises is from a quarter of an hour to half an hour before a meal. It is well to associate them with the daily meals, if for no other reason than that we may have something to remind us of our practice, for the first conditions of success are regularity and perseverance. It is advisable, therefore, that arrangements be made to prac-

tise the exercises every day a short time before breakfast or dinner. If the evening be fixed for them, the time chosen should be about a couple of hours before going to bed.

7. Previously to beginning the exercises, all tight clothing must be removed from neck, chest, and abdomen.

8. During the intervals of rest, of which there should be several whilst going through a group of exercises (see below), the patient should endeavor to breathe deeply, calmly, fully, and strongly; in doing which he places his hands on his hips, or against the back of his head, and takes care to empty the lungs thoroughly at every respiration. In each of the gymnastic exercises the moment should be noted when a deep breath becomes necessary, and breath should be taken at that point in each repetition of the exercise. When a pause for breathing exercises is made between the groups of gymnastic movements, or after each single exercise, six or eight deep respirations should be taken. Such breathing exercises should never be omitted, and may well be taken after every two gymnastic movements.

9. The motto in this as well as in any other curative treatment should be, "Don't overdo it." We must not imagine that our gain will be in proportion to the number of exercises gone through. We really gain in health when and so long only as improvement in the nutrition of the body—*i. e.*, the renewal of used-up organic substances—keeps pace with the muscular movements. So long as this balance is maintained, increased vital power and energy will result from the practice of gymnastics, but if they are carried too far, the result will be the opposite of that intended; namely, increased weakness and exhaustion. On well-selected exercises and on a moderate use of them, therefore, a sure and favorable result depends, and this may only be attained by degrees.

10. If breathing and pulsation have been sensibly accelerated by any given exercise, we must wait till they are quiet again, before proceeding to the next movement.

11. After the muscular strength has been gradually increased, dumbbells (Fig. 170; two iron or wooden balls, connected by a handle, the whole weighing from two to five pounds each) may be employed, and the same exercises as before may be gone through with them.

12. How often each single movement should be repeated, is indicated by the three numbers accompanying each figure. The first number shows the number of repetitions at first; the second, that after two or three weeks; and the third, that after six or eight weeks' practice. The last number is to be regarded as the limit during the rest of the practice. Each individual case, however, may require an alteration in the number of repetitions, and

the middle number will be to many the normal limit, which they must not exceed; particularly, as the three numbers given are based on the calculation of the normal muscular strength of a man in his best years. For people above sixty, for those weak in muscle, or very obese, for the female sex, and for children, about one-half, or, at the most, two-thirds, of the amount will be sufficient.

Those, also, who perform the exercises for local affections only, should not exceed the limit just given.

It stands to reason that old age requires the exercise of every part of the body, so far as may be practicable. It is a great mistake, therefore, for elderly people to suppose that the greatest possible amount of rest will keep them in health. Although such persons cannot bear the same degree of fatigue as the young, a suitable amount of regular and varied exercise is necessary, if health is to be preserved and life prolonged.

13. Let me emphasize here once more the value and efficacy of (a) hydropathy; (b) a system of non-stimulating diet, at least, in most cases; and (c) massage; and the desirability of adopting those systems, in addition to curative gymnastics.

A person, who has no knowledge of curative gymnastics, and their effect, had better leave them alone, in case of severe illness, as he will, perhaps, only do himself harm by attempting them. In the great majority of cases, success will be attained with the other means of cure given in this book.

14. How many times a day curative gymnastics should be practised, and how many exercises should be gone through at each practice, depends entirely on the condition of the patient. If, for instance, a practice consists of only three or four exercises (mowing movement, raising the knee, arm-thrust, sawing movement, or a few similar exercises), from one to five such practices daily will be sufficient; but if a single practice includes a greater number of exercises, the number of practices should not exceed three. The great point here is to observe what amount of exercise will best suit the patient's physical condition. And it must always be remembered that a beginner must be content with fewer movements than the practised gymnast can execute, and that a man in the prime of life can endure more fatigue than the young or old.

When special gymnastics are employed for the cure of local complaints, it will be well to include in the practices movements which will exercise the whole of the muscles of the body, in order to bring the whole system into sympathetic and simultaneous activity.

As in a set of cog-wheels, or other compound wheel-work, each single wheel performs its part when the whole is in motion, so it is with our organism, every single part of which has its office in sustaining the innermost living whole.

16. A still greater advantage is derived from curative gymnastics, when they are employed in addition to, and in connection with, massage; for the success of massage will be completed and confirmed by exercise of the muscles.

That massage ought, in many cases, to precede curative gymnastics, is demonstrated by the fact that after massage most of the movements can be performed, which were impossible before that. It is not meant that every performance of gymnastics should be preceded by massage; it will be sufficient if the massage be applied once a day. It is difficult to give precise instructions in this respect; everybody must find out for himself, what is adapted to his special case. It only remains to be mentioned, that a proper interval of rest must be observed between the gymnastics and massage when they are combined.

17. Bed-ridden persons can execute the movements in bed, or elsewhere in a sitting or lying posture, or with the help of a second person: (In the last case the movements will be passive. See Index.)

18. By the use of curative gymnastics both invalids and healthy people attain, among other advantages, the blessings of refreshing sleep, improved appetite, a cheerful mind, fresh vigor of life, and increased sense of enjoyment.

In practising the "arm-thrust" or hitting movements, to the front, sideways, upwards, downwards, and backwards, the fists must be kept tightly closed, and each thrust or blow should be delivered with the full and energetic extension of the arm muscles. (Figs. 161, 162, 163, 164, 165.)

When the muscular strength has increased, the exercises may be practised with dumb-bells, as already mentioned. (Figures 166 and 170.) They serve to supple the shoulder and elbow joints, in rheumatic affections or disabled condition of the arm muscles; they also promote healthy breathing, and should form part of any course of general exercises. See "REMARKS ON CURATIVE GYMNASTICS."

The chest-expanding movement (Fig. 167) in which energy is specially concentrated on the bringing together, and separation respectively of the hands, is efficacious in cases of tuberculosis of the lungs, pleurodynia, asthma. It also promotes good breathing. See also "REMARKS ON CURATIVE GYMNASTICS."

Arm thrust (hitting movement) to the front.
10, 20, 30 times.

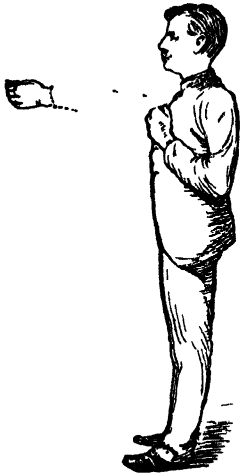


Fig. 161

Arm thrust, sideways.
10, 20, 30 times.

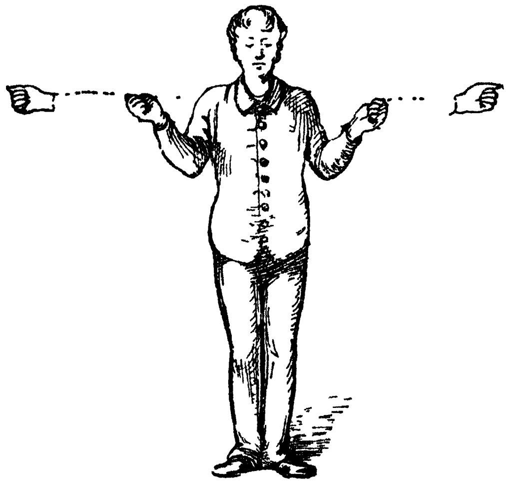


Fig. 162.

Arm thrust, upwards.
6, 12, 20 times.



Fig. 163.

Arm thrust to the rear.
6, 12, 18 times.



Fig. 164.

Arm thrust, downwards.
10, 20, 30 times.



Fig. 165.

Exercise with dumb-bells referred to in paragraph 11.

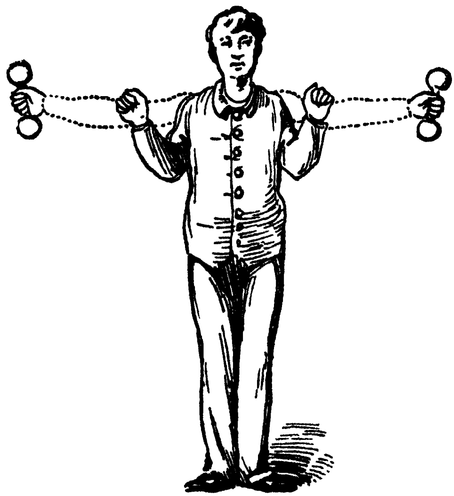


Fig. 166.

Exercise without dumb-bells. 1. Raise the arms at their full extent in line with the shoulders; the fists tightly closed. 2. Bring both fists smartly back to the chest, elbows and arms close to the body, shoulders well back.

Chest-expanding Exercise.

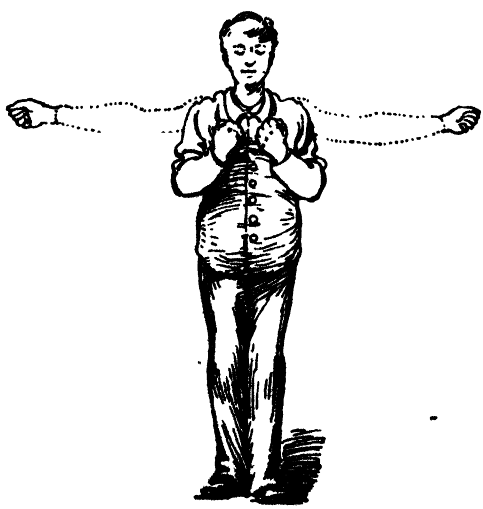


Fig. 167.

Arm Circles. Fig. 168. Both arms—fully extended, and with fists closed—describe circles as large as possible. Each should pass close to the head; but this may only become possible by degrees. The movement is performed first from front to rear, and afterwards the reverse way.

By this exercise (Fig. 169) respiration is much assisted, and the shoulder-joints are rendered pliable; it is used in cases of asthma, tuberculosis of the lungs, or weakness of the muscles concerned. See also "Remarks on Curative Gymnastics."

Arm Circles.
8, 14, 20 times.

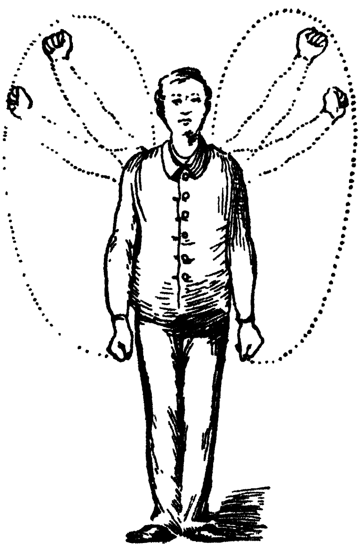


Fig. 168.

Arm Rolling.
20, 30, 40 times.

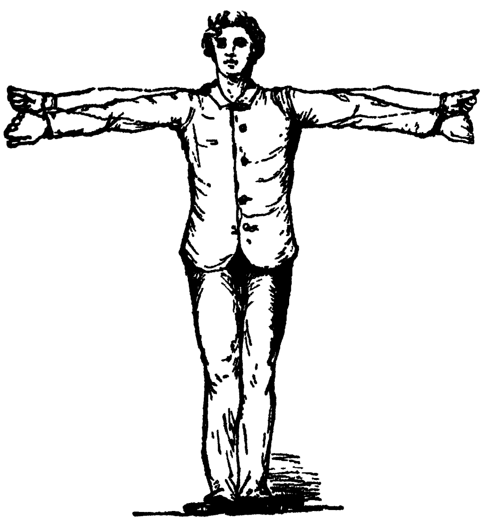


Fig. 169.

In performing the Arm-Rolling exercise (Fig. 169) me must imagine ourselves to be screwing a gimlet into wood with each hand, the arms being fully extended in a line with the shoulders.

In making the figure 8 movement (Fig. 170) the hands describe a horizontal figure 8 (thus ∞) but the wrists only should move.

These movements, Figs. 169, 170, are practised to make the arm-joints as well as the wrists pliable, and to correct any failure of these muscles; also for gouty contractions of the hand and finger-joints; for writer's cramp, and as an auxiliary remedy in various forms of *St.*

Vitus's dance and epilepsy, etc. EXTENDING AND CLOSING FINGER-EXERCISES, as shown in Fig. 179, also belong to this class. See also "REMARKS ON CURATIVE GYMNASTICS."

The figure 8 movement.
20, 30, 40 times.

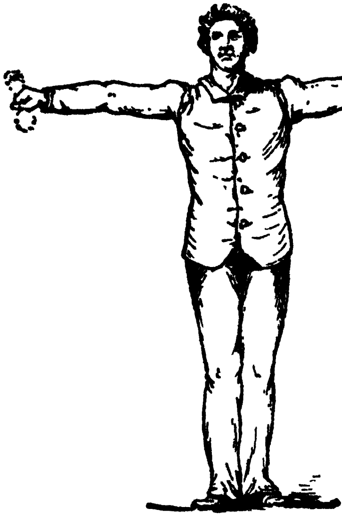


Fig. 170.

Swinging the arms sideways, right and left (compare Fig. 193).
15, 25, 40 times.

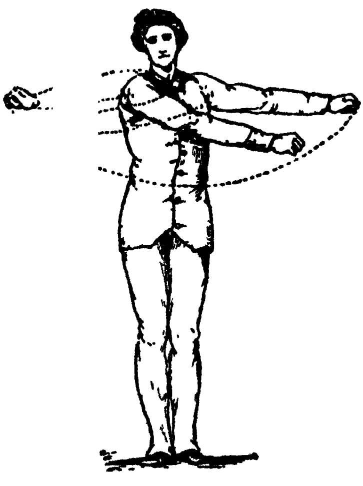


Fig. 171.

Swinging the arms to the front and rear.
15, 25, 40 times.



Fig. 172.

In swinging the arms to the right and left (Fig. 171) the hip-joints should be loose, and the body should conform to the movements of the arms.

This movement acts beneficially in stimulating the liver and spleen, and strengthening the muscles of the back.

In swinging the arms forward and backward (Fig. 172) the fists must be clenched, and the body should follow the movements of the arms from the hip-joints. This exercise is useful (1) in assisting the circulation of the blood in the whole system; (2) against sluggishness of the abdominal functions; (3) in cases of inertness of the abdominal, spinal, and arm muscles. It is also an excellent way of warming oneself when cold. If the exercise be performed so that the arms work in opposite directions, instead of together, one making the swing to the front while the other swings to the rear, a more thorough shaking of the body will be effected, and the trunk muscles as a whole will be more completely called into action. This last exercise is also used specially to remedy curvature and volvulus of the spine. In such cases, however, the stress of the movement must principally be in one direction only, with each arm, *i. e.*, with the right forward, and the left back; or *vice versa*, according to the position and nature of the malformation. See "REMARKS ON CURATIVE GYMNASTICS."

THE CHOPPING MOVEMENT. In this exercise the knee-joints must be kept flexible. It acts beneficially (1) in cases of sluggish action, or suspension, of the abdominal functions; (2) on the nerves of the spinal cord, being therefore specially useful even in advanced spinal paralysis.

In the former case, special stress must be laid on the downward movement; in the latter case on the upward one, and on the preparation for the downward movement. See "REMARKS ON CURATIVE GYMNASTICS."

The chopping movement.

6, 12, 18 times.

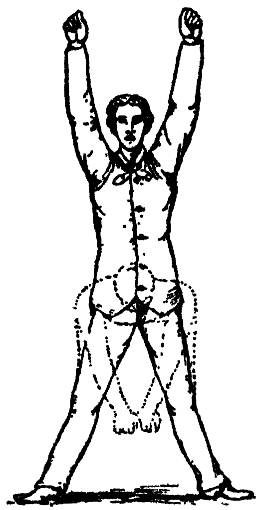


Fig. 173.

Raising the leg sideways.

5, 10, 18 times with each leg.

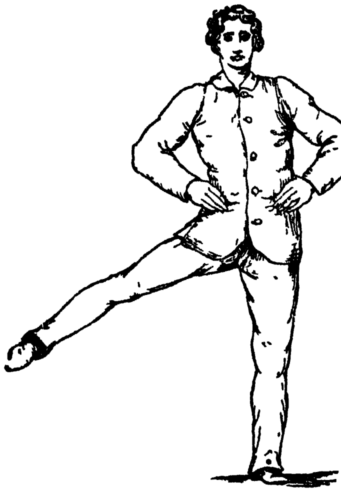


Fig. 174.

This movement (Fig. 174) is executed first with one leg and then with the other. It has the same salutary effect as the circular leg movement, but acts at the same time beneficially in congestions of the portal vein system, because it has a shaking and stimulating effect upon the region of the liver and spleen. See "REMARKS ON CURATIVE GYMNASTICS."

Leg circles.

5, 8, 12 times with each leg.

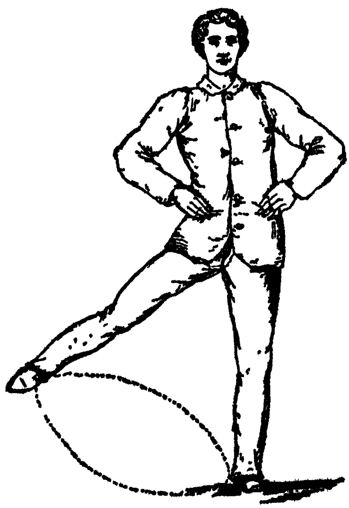


Fig. 175.

This (Fig. 175) is performed by each leg in turn, at its full extension. The body should remain steady; and the foot describing the circle should be carried as far to the front and rear, and as high at the side as possible. The movement is a soothing and healing agent in gouty and rheumatic affections of the hip-joint. Any inflammation in these parts must first be removed by water treatment. The movement acts also beneficially in muscular weakness of those regions. It has, likewise, a detergent effect. See "REMARKS ON CURATIVE GYMNASTICS".

The leg must be stretched to its full extent in this exercise (Fig. 176), while the foot, carried about its own length to the front, is made to describe small circles, as shown in the illustration; turning first outward, then downward and inward. A pause may be made at the extreme points outward and inward, while stress is brought to bear (at the hip) to get the utmost amount of turn in each direction. This has an effect similar to that of the circular leg movements; see *ibid.* See also "REMARKS ON CURATIVE GYMNASTICS".

This exercise (Fig. 177) consists in drawing the legs together from a wide-straddling position, by short, sharp side movements of each

Foot circles.
(15, 25, 30 times with each foot.)

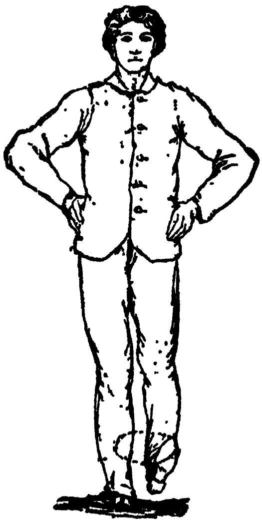


Fig. 176.

Drawing the legs together.
(4, 6, 10 times.)

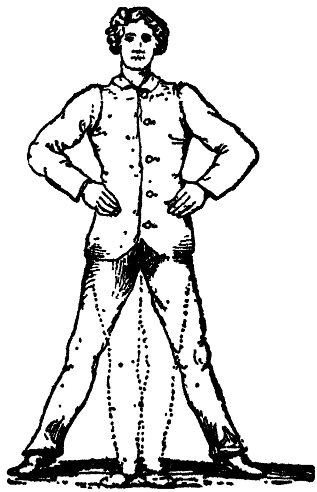


Fig. 177.

foot in turn, till both meet in the middle. The knees are kept firmly braced up, and only the toes touch the ground, while the legs are being drawn together. This exercise acts effectively against infirmity of the feet, etc.; and is applied also as a detergent. See "REMARKS ON CURATIVE GYMNASTICS".

In this exercise (Fig. 178) both hands are firmly placed on the hips, the thumbs to the rear; the elbows are then pressed vigorously back; the back being kept perfectly straight all the time, and the head well up. A good effort should be made each time to get the elbows back as far as they will go; the breath should be drawn in quickly,

through the nose, during the backward movement, and thoroughly expelled as the arms come forward.

Elbows Back.

8, 12, 16 times.

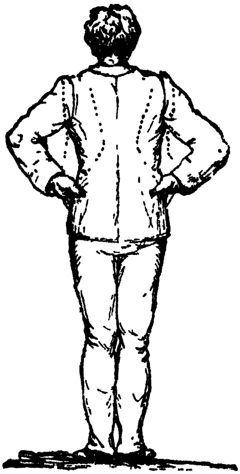


Fig. 178.

In this exercise all the fingers are stretched, and spread, to their full extent, lengthwise and apart; and then bent inward—so resolutely as to bring a strain on every joint—and brought together, either as far as shown in the illustration (Figure 179) or farther till the fist is tightly clenched. These movements are used in the same complaints as those mentioned under arm rolling (Figure 169), and the Figure 8 movement (Fig. 170). See "REMARKS ON CURATIVE GYMNASTICS."

Extension and Contraction of the Fingers.

15, 20, 25 times.

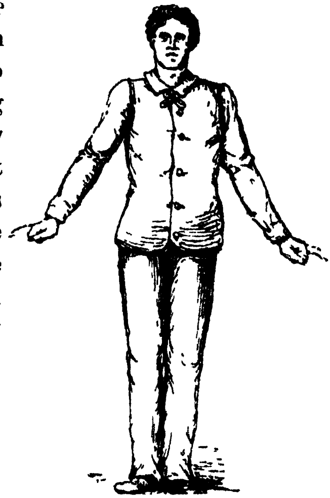


Fig. 179.

Foot Stretching and Bending Exercise.

15, 25, 35 times with each foot.



Fig. 180.

This movement (Figure 180) is made from the ankle-joints alternately, the toes being stretched, and bent to the utmost extent practicable, while the ankle, and instep joints are carefully worked—either in a circular movement, both outward and inward, or only up and down. These movements are calculated to make the ankles, insteps, and toes flexible; and to cure lameness and slight contractions (stiffness and shrinking) of the joints. They are also useful for detergent purposes; and are an excellent means of warming the feet. See "REMARKS ON CURATIVE GYMNASTICS."

Raising the Knee.

5, 12, 18 times with each leg in turn.

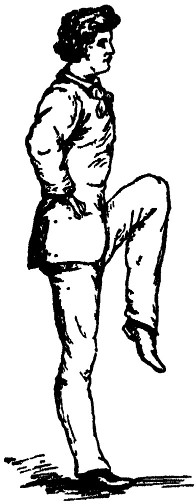


Fig. 181

In this excercise (Figure 181), in which the legs are raised by turns, an effort should be made each time to get the knee as high as possible, without allowing the body to take any part in the movement.

It acts most beneficially on the digestion, clears obstructions of the bowels, and is specially to be recommended in cases of sluggishness or interruption of the abdominal functions. It is likewise an excellent remedy for flatulence, abdominal hypochondria, hysteria, rectal prolapsus or external piles, chronic fluor albus, etc.

It should be omitted, or very cautiously practised, if inflammation exists in the abdomen, or if there is abdominal hernia, or predisposition to hemorrhage in that part. See "REMARKS ON CURATIVE GYMNASTICS".

Bending and Stretching the Knee-joint to the Front.

6, 9, 12 times with each leg in turn

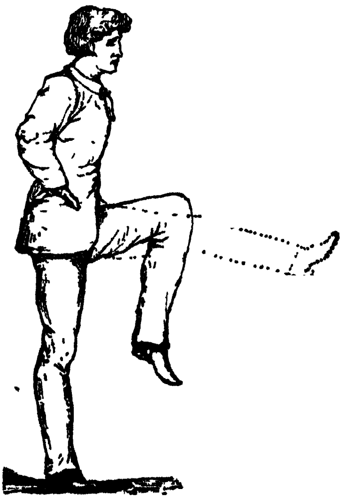


Fig. 182.

Bending and Stretching the Knee-joint to the Rear.

12, 16, 18 times with each leg.

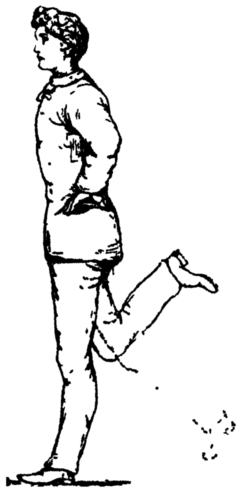


Fig. 183.

In this case (Figure 182), as in the last, the legs must be exercised alternately. The knee-joint is vigorously, bent, and then stretched out perfectly straight. The movement acts beneficially in cases of weakness or stiffness of the knee-joint; and is of use in relieving hemorrhoidal obstructions. See "REMARKS ON CURATIVE GYMNASTICS".

An exercise in which the leg cannot be raised as high as in the last. It is best performed by practising each leg successively several times.

This movement is good for stiffness in the knee-joint, which it renders pliable; in weakness of the knee-joint; and in the first stages of paralysis in the foot, and spinal cord. Both this and the previous exercise (Figures 183 and 184) have the effect of drawing the blood away from the head and chest. See "REMARKS ON CURATIVE GYMNASTICS".

Lowering and Raising the Body.
8, 12, 20 times.

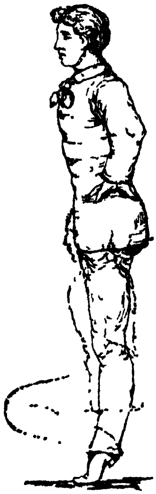


Fig. 184.

In this exercise (Figure 184) the hands are placed on the hips, and the heels are raised off the ground, without being separated; the body is then allowed to sink down, retaining its upright position, as far as possible; it then, by reversing each movement, resumes the standing position. The exercise acts in a strengthening manner in paralysis of the lower part of the body, renders all the joints and muscles of the leg pliable, and is useful as a detergent. See "REMARKS ON CURATIVE GYMNASTICS."

Head Circles.
8, 12, 20 times.

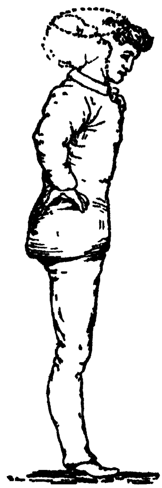


Fig. 185.

The head in this exercise is turned (Figure 185) first from right to left, then from left to right, without changing the position of the body. This, as well as the next movement (Figure 186), is employed in stiffness of the neck, as well as in nervous giddiness. See "REMARKS ON CURATIVE GYMNASTICS."

Turning the Head to Right and Left. 6, 9, 12 times.

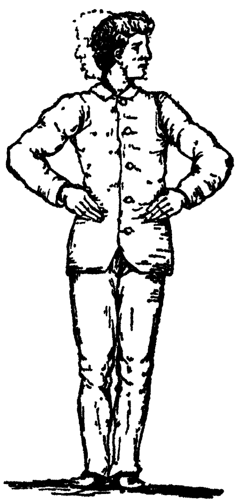


Fig. 186.

Bending the Body Sideways.
15, 25, 35 times.

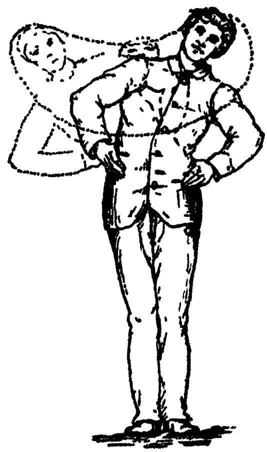


Fig. 187.

In turning the head from right to left and *vice versa*, the endeavor should be made each time to bring the chin over the shoulder. For the ailments to the cure, of which this movement is adapted, see the instructions for the previous exercise, "Head Circles." See also "REMARKS ON CURATIVE GYMNASTICS."

Bending the Body to the Front and Rear.
10, 20, 30 times.

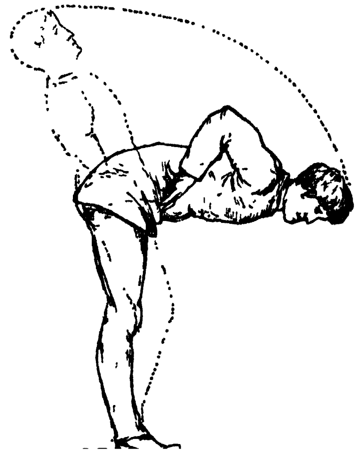


Fig. 188.

Bending the body to the right and left (Fig. 187) must be done without any violent exertion.

This exercise (Fig. 188) promotes the circulation of the blood, and the activity of the functions, in the abdominal organs; is beneficial in chronic affections of the liver and spleen, and applicable in all cases of disordered condition of the portal vein system. See "REMARKS ON CURATIVE GYMNASTICS." Bending the body forward and backward must be done without violent exertion, the legs remaining straight and firm. It is useful in constipation, in sluggish action of the abdominal organs, and in paralysis of the lower spinal muscles. See "REMARKS ON CURATIVE GYMNASTICS."

Body-circles.
6, 8, 12 times.

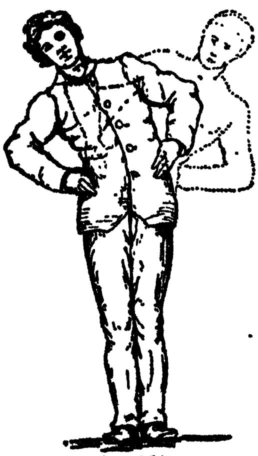


Fig. 189.

In this exercise (Figure 189) the trunk above the hip-joint must describe a circle from right to left leaning back, and from left to right leaning forward, as wide and as low down as possible, without any violent exertion.

It is good for weakness of digestion; for acute and chronic constipation, and ailments arising therefrom; also for stiffness of the muscles of the hip-joint, and for nervous giddiness. In the last case, the patient must be accustomed gradually to the circular movement, which may be performed sitting.

For the purpose of direct action on the bowels, it is advisable to execute only half the movement; *i. e.* to describe only the half of the circle

from right to left, leaning back. See "REMARKS ON CURATIVE GYMNASTICS."

To attain a perfectly horizontal position in bed, which is necessary for this exercise (Fig. 190) remove the pillow. If it be performed out of bed, fold a carpet or rug and lie on it; or two pillows may be used, putting one under the head and the other under the hips.

The exercise consists in raising the trunk vertically from the horizontal while the legs remain still. If it cannot be successfully accomplished at first, a weight may be attached to the feet; or, if the per-

Rising From the Lying to the Sitting Position.

5, 10, 15 times.

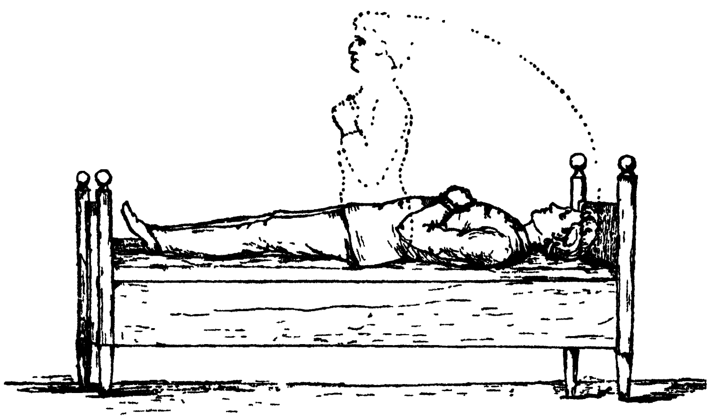


Fig. 190.

formance take place out of bed, some assistance may be derived by putting the toes under some piece of furniture in the room (chest of drawers, press, etc.); it is sufficient sometimes to put the toes against the wall; or, the upper part of the body may be somewhat raised by laying something under it. Such a raised position is already offered by a couch or bed if the pillow be not taken away. The arms are at first crossed over the chest, or perhaps stretched out in front; but later on, when the exercise is performed more easily, they are placed beside or behind the head. If the movement is to be continued till the standing position is reached, weights are attached to the hands; the elbows being kept close to the sides, and the arms bent up and resting on the chest.

This exercise operates beneficially on all the abdominal organs (after four or five repetitions of it a pleasant sensation of warmth will begin to be experienced in the abdomen and gastric region). It is eminently useful

in all kinds of chronic abdominal irregularities, in inactivity or weakness of the abdominal muscular system; and as an attempt to completely remove abdominal hernia. See "REMARKS ON CURATIVE GYMNASTICS."

Twisting the Body
10, 20, 30 times to and fro.

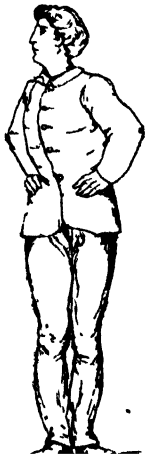


Fig. 191.

Exercise No. 191 is performed first to the right, then to the left; turning the body on its own axis as much as possible to either side, the legs being kept rigidly straight, and the back flat and upright. This movement is employed in cases of weakness of the spine, or of the muscular system of the hips and abdomen; in defective digestive functions and constipation, as well as for promoting the circulation of the blood in the abdomen. See "REMARKS ON CURATIVE GYMNASTICS."

Reciprocal Sawing Movement, With Both Arms at Once.
10, 20, 30 times.

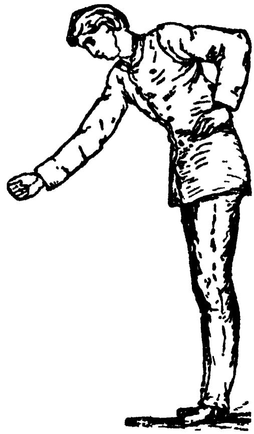


Fig. 192.

The Mowing Movement.
10, 15, 20 times.

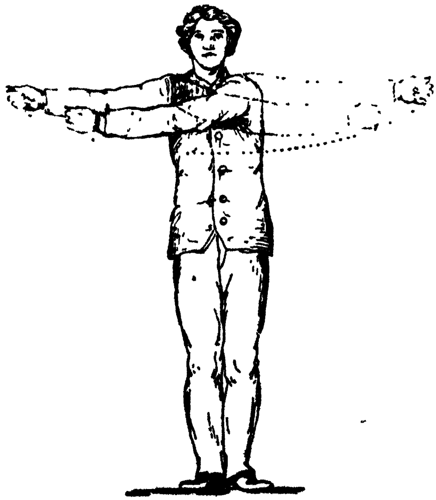


Fig. 193.

Raising the Shoulders.
20, 30, 40 times.

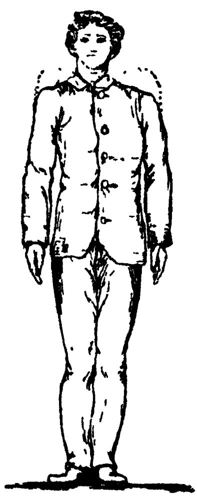


Fig. 194.

In this sawing movement, one arm is pushed vigorously forward and downward at the same time that the other is drawn inward and upward by bending the elbows: the movements being thus performed with each arm alternately. It is of great utility in strengthening the muscles of the arms, shoulders, and back; and in various conditions of ill-health, such as defective or suspended activity of the abdominal organs.

It also reduces glandular swellings in the thoracic and abdominal regions. See "REMARKS ON CURATIVE GYMNASTICS."

The mowing movement (Fig. 193) is made energetically with both arms rigidly extended, the feet being kept at rest. Strenuous muscular exertion should be thrown into it, as if overcoming weighty resistance all the time.

It has an excellent effect in incipient paralysis of the spinal cord, as well as in general debility and muscular weakness. See "REMARKS ON CURATIVE GYMNASTICS."

This movement (Fig. 194) is to be executed with vigor in the upward, but somewhat more gently in the downward, direction.

It is of service in stiffness of the shoulder muscles, but more particularly in incipient tuberculosis of the lungs; because, like deep respiration, it promotes a healthy activity of the lobes of the lungs, where, as is well known, tuberculosis begins.

If one shoulder is higher than the other—a condition resulting from paralysis or curvature of the spine, the exercise must always be practised with the lower shoulder only.

EXERCISES WITH THE STICK, OR BAR-BELLS.

These movements are shown by Figures 195, 196, 197, 198. It must be observed: 1) that in order to pass the stick from the position at the back (Fig. 188) over the head to the front, it must be grasped with a wider interval between the hands than is shown in Figures 195, 196 and 197; 2) that many persons will at first only get as far as the position shown in Fig. 197; it is in Fig. 198 alone that the exercise is shown completed; 3) that the practice of the movements indicated by Figures 195, 196, 197, or even of the first two, will have a highly beneficial effect on the respiratory and thoracic organs; 4) that beginners may use a somewhat longer stick than is here seen, in order to get a wider interval between the hands; but in that case the hands should be brought nearer to each other, by degrees; 5) that each movement is to be performed with an energetic swing; and that in the complete exercise (Fig. 198) the arms are to be kept at their full stretch; 6) that an easy rocking of the

Stick, or Bar-bell Exercise.

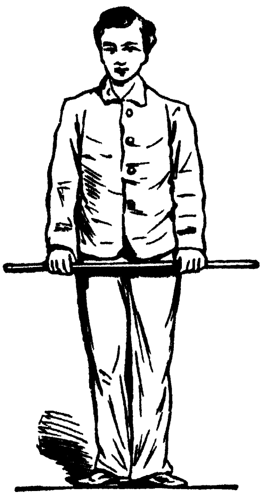


Fig. 195.

Stick, or Bar-bell Exercise.

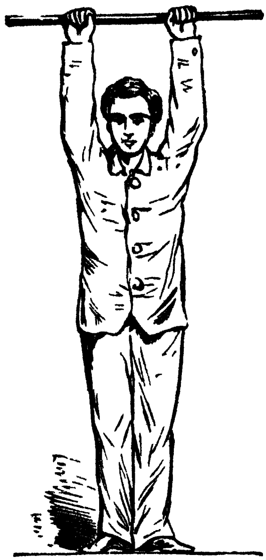


Fig. 196.

Stick, or Bar-bell Exercise.

(Fig. 195, 196, 197, are to be practised 8, 16, 20 times backward and forward.)

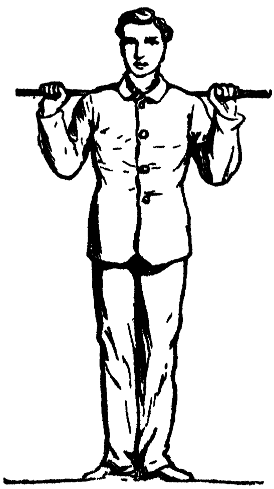


Fig. 197.

Stick, or Bar-bell Exercise Completed.

8, 16, 20 times backward and forward.

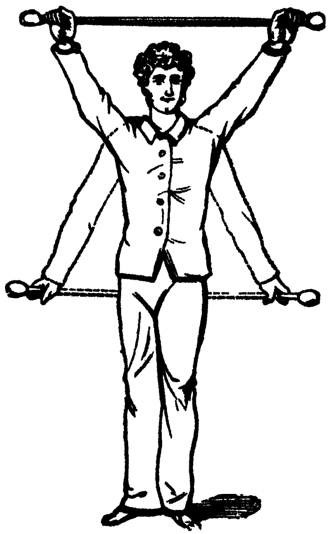


Fig. 198.

body from the waist upward should accompany each forward and backward swing of the stick.

This exercise promotes and perfects the process of respiration, acts beneficially on loss of power in the shoulder muscles, etc., serves to make the shoulder-joints pliable, and stimulates the abdominal functions. See "REMARKS ON CURATIVE GYMNASTICS."

In this exercise (Fig. 199) the object is to get first one and then the other leg over the stick. When both are well over, they have to get back again; which may not prove an altogether easy task.

Stepping Over the Stick.
5, 8, 10 times.

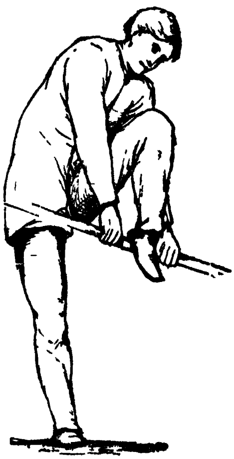


Fig. 199.

The Trot Movement, "Marking Time.'
60, 100, 150 times with each foot.

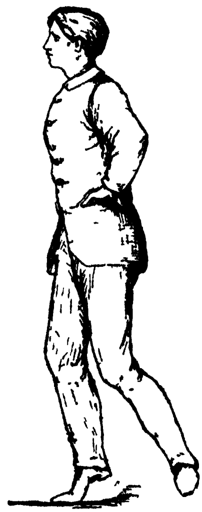


Fig. 200.

The exercise is indicated in cases of obstinate constipation, and may be tried as a means of combating the troubles attending internal piles, provided there is no inflammation. The exercise must, however, not be performed, if the patient suffers from abdominal hernia or marked determination of blood to the head. See "REMARKS ON CURATIVE GYMNASTICS."

This movement (Fig. 200) consists in springing off the toes of each foot in turn, the knees and ankle-joints being elastic.

The efficacy and strain of this exercise may be increased or diminished, as circumstances suggest, by making a greater or less demand upon the muscles, and so regulating the height of the spring. It is recommended for

weakness of the muscles of the foot, and for cold feet; it promotes the action of the bowels, and the circulation of the blood in the abdomen, etc., and is efficient as a derivative in drawing the blood away from the head and chest.

It is also adapted for the relief of amenorrhœa and piles, and it overcomes sleeplessness by causing agreeable fatigue. See "REMARKS ON CURATIVE GYMNASTICS."

Rest, and not exercise, is however demanded in case of an inflammatory condition of the piles, or of excessive hemorrhage, no matter whether referable to piles or to the period.

FULL RESPIRATION (Fig. 162), should form part of all curative gymnastics. The process should be as follows: The standing position, with the arms on the hips, having been taken up, the lungs are first entirely but gradually emptied, the seconds being counted aloud as the breath slowly escapes. The mouth is then closed, the shoulders raised and pressed back, the chest expanded; the air is now allowed to enter, through the nostrils, until the lungs are full; the breath is then held for a time, as long as it can be without fatigue, and is again allowed to escape, as above.

Breathing position, without a stick.



Fig. 201.

This "art of respiration" should be practised several times in going through a group of gymnastic exercises. It should, however, only be done in pure air, either in a room with the window open, or out of doors.

Respiration may also be practised with a stick, or the bar-bells, as follows (see Fig. 195): From the position there shown the stick is raised, by a vigorous effort, above the head, as in Fig. 196. The cavity of the chest is thus dilated crosswise. From this position the stick is lowered, by a sharp motion of the elbows, to that shown in Fig. 197. A deep breath is now taken, as above, and held. When, after a time, a little of the breath is allowed to escape, the lungs are filled again by a short breath, which replenishes the points of the lungs, under the shoulder, and is the crowning act of the breathing process. This same kind of respiration may also be performed without a stick; the hands being in that case held as I now give several groups of exercises, applicable in the case of certain diseases and ailments. These groups are, however, only to be looked upon as general guides, and the point here is always to ***individualize***—to discover by actual observation what exercises are best suited to each individual case, and to arrange the groups, and the methods

and amount of practice accordingly, either for oneself or in consultation with an expert. It is certainly advisable to consult a competent man in such a matter. These groups, with the movements indicated in them, are therefore subject to alteration (curtailments, additions, etc.).

Curative Gymnastics: Group I.

Twisting the body. Fig. 191.
Bending the body to the front and rear. Fig. 188.
Mowing movement. Fig. 193.
Deep respiration. Fig. 201.
Swinging the arms to the front and rear. Fig. 172.
Bending and stretching the knee-joint to the front. Fig. 182.
Rising from the lying to the sitting position. Fig. 190.
Deep respiration. Fig. 201.
Trot movement. Fig. 200.
Body circles. Fig. 189.

This group is directed against chronic constipation, disordered digestion, weakness of the digestive organs in general, sluggish action of the abdominal organs, hemorrhoids, etc. If it be desired to bring other movements into the scheme of treatment, the following are adapted for those complaints:

Bar-bell exercise (Fig. 198); bending and stretching the knee-joint to the front (Fig. 182); swinging the arms sideways (Fig. 171); raising the leg sideways (Fig. 174); bending the body sideways (Fig. 187); the chopping movement (Fig. 173, shown in Fig. 201, instead of as with stick, Fig. 197). See also "Breathing Gymnastics."

Curative Gymnastics: Group II.

Twisting the body. Fig. 191.
Bending the body to the front and rear. Fig. 188.
Arm thrust to the rear. Fig. 165.
Swinging the arms to the front and rear. Fig. 172.
Rising from the lying to the sitting position. Fig. 190.
Swinging the arms sideways, right and left. Fig. 171.

This group is effectual in thoroughly curing abdominal hernia. It must be borne in mind, however: 1) that curative gymnastics are in this case to be resorted to only under professional direction, because the exercises must not be employed in every case of rupture (*e. g.*, they cannot be recommended in that rare ailment femoral hernia); 2) the application of curative gymnastics is never allowed in a case of hernia which is irreducible—*i. e.*, in which the protrusion cannot be pushed completely back and be retained; 3) the rupture must be kept perfectly within bounds by the truss during the exercises; 4) the course must be continued

uninterruptedly for six months or more; at first once a day, perhaps later twice a day. When the object has been attained, the movements are continued several times a week, to guard against a relapse, and not until after such precautionary measures should the truss be dispensed with. It is evident that the prospect of cure is greater with youthful patients than with persons of more advanced age.

For further particulars on each single movement, see ibid.

Curative Gymnastics: Group III.

Raising the shoulders. Fig. 194.
Arm thrust upward. Fig. 163.
Arm circles. Fig. 168.
Deep respiration. Fig. 201.
Elbows back. Fig. 178.
Body circles. Fig. 189.
Deep respiration. Fig. 201.
Chest expanding exercise. Fig. 167.
Bar-bell exercise. Fig. 198.
Deep respiration. Fig. 201.

This group is employed for chest diseases, such as asthma, difficulty of breathing, narrow chest, incipient tuberculosis of the lungs, etc.; it serves to promote respiration in general, and to strengthen the voice, *e. g.*, for singers, speakers, and stammerers. For particulars of each single movement, see ibid.

Curative Gymnastics: Group IV.

Swinging the arms to the front and rear. Fig. 172.
Lowering and raising of the body. Fig. 184.
Arm thrust to the front. Fig. 161.
Arm thrust upward. Fig. 163.
Deep respiration. Fig. 201.
Arm thrust sideways. Fig. 162.
Body circles. Fig. 189.
Drawing the legs together. Fig. 177.
Reciprocal sawing movement. Fig. 192.
Deep respiration. Fig. 201.
Arm circles. Fig. 168.
Raising the knee. Fig. 181.
Rising from the lying to the sitting position. Fig. 190.
Deep respiration. Fig. 201.
Bar-bell exercise. Fig. 198.

If any other movements be required, the following may be used: Trot movement (Fig. 200); swinging the arms sideways (Fig. 171); step-

ping over the stick (Fig. 199); mowing movement (Fig. 193); raising the leg sideways (Fig. 174); leg circles (Fig. 175); arm circles (Fig. 168).

This group should certainly be combined with a strengthening treatment, and is then to be gone through, once, twice or three times a day, according to the patient's condition, no one practice exceeding about twenty minutes including the intervals of rest. If, however, the additional exercises enumerated below the group be prescribed, each practice will then take about thirty minutes.

Thirty minutes spent in muscular activity of this kind are equal, in the aggregate, to a four or five hours' walk; and the purposes of health are even better served by the former, because muscular activity is exerted in every direction, and the body is less fatigued by it than by such a long walk.*)

For weakly and elderly persons (above sixty years of age) and for the female sex, the number of repetitions of single exercises may be reduced to about one-half, or one-fourth, of the above groups respectively.

This group is particularly recommended, as a preventive of disease; and when so used it may be practised once, or several times a day.

For the female sex regular muscular activity (curative gymnastics) is urgently required; and particularly at the period when menstruation ceases. The greater part of the ailments and dangers attending this transitional period are averted by it, and a happy old age is initiated.

For further particulars on each single movement, se ibid.

Curatve Gymnastics: Group V.

Arm thrust to the front. Fig. 161.
Arm thrust sideways. Fig. 162.
Mowing movement. Fig. 193.
Deep respiration. Fig. 201.
Raising the knee. Fig. 181.
Bar-bell exercise. Fig. 198.
Lowering and raising the body. Fig. 184.
Arm circles. Fig. 168.
Deep respiration. Fig. 201.
Drawing the legs together. Fig. 177.
Bending the body to the front and rear. Fig. 187.
Turning the head to the right and left. Fig. 186.

We do not wish, by what we have said above, to lessen by one degree the high value which we set upon a four or five hours' walk, for the sake of the fresh air so enjoyed.

Everybody who leads a sedentary life or whose occupation does not admit of much general exercise, ·uld perform this group of curative Gymnastics once or twice a day in the open air, and, if possible, immediately before breakfast and supper. Each single exercise should be performed from five to ten ·s, and the whole group gone through three or four times. (Each pair of figures 1 and 2, 3 and 4, 5 and 6 count as one exercise only.) If the exercises cannot be undertaken in the open air they should be gone throu ndoors with the window wide open. By performing these exercises regularly many diseases will be warded off.



Fig. 1. Forward thrust of arm and raising right leg.



Fig. 2. Forward thrust of arm and raising left leg.



Fig. 3. Backward thrust of arm and raising right leg.



Fig 4. Backward thrust of arm and raising left leg.



Fig. 5. Upward thrust of arm and raising right leg.



Fig. 6. Upward thrust of arm and raising left leg.



Fig. 7. Bending the trunk backwards and forwards.



Fig. 8. Arm circles.

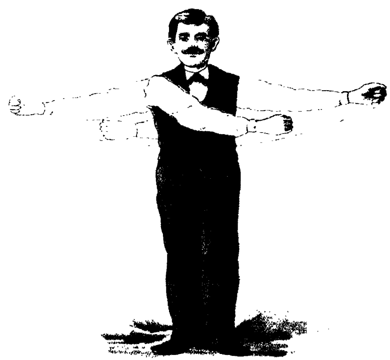


Fig. 9. Swinging the arms sideways, right and left.



Fig. 10. Body circles.

If this group needs supplementing, the following movements may be introduced:

Elbows back (Fig. 178); leg circles (Fig. 175); arm-thrust upward, downward, and to the rear (Figs. 163, 164, 165); rising from the lying to the sitting position (Fig. 190); bending and stretching the knee-joint to the front and to the rear (Figs. 182, 183); arm-rolling exercise (Fig. 166); chopping movement (Fig. 173); raising the leg sideways (Fig. 174); figure 8 movement (Fig. 170); stretching and bending the foot (Fig. 180); head circles (Fig. 185); swinging the arms to the front and rear (Fig. 172).

This group is of great value in the normal development of children, and especially of those persons who lack the opportunity of general muscular exercise. Many diseases and bodily deformities are thereby prevented, the foundation of which is often laid by long sitting at school desks or at unhealthy occupations. These exercises may be practised by children from the age of four or five years upward; and they should be continued through the whole period of childhood. The group should be repeated several times a day. For explanation of each single movement, see ibid. Refer also to "GYMNASTICS."

CURATIVE GYMNASTICS: GROUP VI.

Swinging the arms to the front and rear. Fig. 172.
Trot movement. Fig. 200.
Mowing movement. Fig. 193.
Deep respiration. Fig. 201.
Swinging the arms sideways. Fig. 171.
Stepping over the stick. Fig. 199.
Deep respiration. Fig. 201.
Reciprocal sawing-movement. Fig. 192.
Rising from the lying to the sitting position. Fig. 190.

This group acts directly on intestinal obstructions, protruding piles, and menorrhagia. If, however, those ailments are due to a serious cause, or if a generally disordered condition of the entire system is at the bottom of them, then this treatment will be out of place; and the curative measures must be directed to the removal of the cause or causes. The treatment will in many cases be of a strengthening nature. Whenever, therefore, a doubt exists as to the real cause of the apparent ailment, professional advice should be taken as to the advisability of curative gymnastics. For further particulars on each single movement, see ibid.

CURATIVE GYMNASTICS: GROUP VII.

Leg circles. Fig. 175.
Drawing the legs together. Fig. 177.
Dumb-bell exercise. Fig. 166.

Bending and stretching the knee-joint to the front. Fig. 182.
Lowering and raising the body. Fig. 184.
Deep respiration. Fig. 201.
Figure 8 movement. Fig. 170.
Trot movement. Fig. 200.

This group is used for the derivation of the blood from certain parts, and to remove chronic pain and irritation from head and chest.

Driving the blood from the head and brain is effected by head circles (Fig. 185); turning the head from right to left (Fig. 186); arm thrusts to the front, sideways, upward, downward and to the rear (Figs. 161, 162, 163, 164, 165); arm circles (Fig. 168); deep respiration (Fig. 201); swinging the arms sideways to right and left (Fig. 171).

For more on each single movement, see ibid.

Curative Gymnastics: Group VIII.

Leg circles. Fig. 175.
Raising the knee. Fig. 181.
Raising the leg sideways. Fig. 174.
Deep respiration. Fig. 201.
Drawing the legs together. Fig. 177.
Rising from the lying to the sitting position. Fig. 190.
Deep respiration. Fig. 201.
Foot circles. Fig. 176.
Reciprocal sawing-movement. Fig. 192.

This group is serviceable in diseases of the hip-joint, or of the muscles and nerves surrounding and moving it; particularly in sciatica. In this disease Dr. *Schreiber* prescribes a gradually increasing course of exercises every day, supplemented by massage; a method of treatment which is, he says, highly to be commended; for it is only by such means that a patient suffering from a severe attack can be brought through the most trying period of his illness. (See Dr. *Schreiber's* book on "Massage, and the systematic exercise of the muscles.")

Over-excitement and irritation are to be guarded against in this disease; great caution, therefore, must be exercised in gradually increasing movements; and they should be performed in a recumbent position, if the patient's condition requires it. Recourse must also be had occasionally to passive movements, if it is out of the patient's power to perform the exercises himself.

For further particulars on each single movement, see ibid.

Curative Gymnastics: Group IX.

Elbows back. Fig. 178.
Chest-expanding exercise. Fig. 167.
Reciprocal sawing-movement. Fig. 192.
Deep respiration. Fig. 201.
Dumb-bell exercise. Fig. 166.
Swinging the arms to the front and rear. Fig. 172.
Arm circles. Fig. 168.
Deep respiration. Fig. 201.
Swinging the arms sideways. Fig. 171.

This group is eminently useful as a cure for muscular rheumatism in the shoulder, and in cases of neuralgia in those parts; moreover, in chronic inflammation of the shoulder-joint, and its consequences, such as stiffness or agglutination of sinews and ligaments; also in sprains and dislocation of joints. If inflammation sets in, it must be allayed with cool compresses.

These movements are generally preceded by massage.

For further particulars on each single exercise, see ibid.

Curative Gymnastics: Group X.

Reciprocal sawing-movement. Fig. 192.
Arm thrust sideways. Fig. 162.
Arm thrust upward. Fig. 163.
Deep respiration. Fig. 201.
Arm thrust downward. Fig. 164.
Arm thrust to the rear. Fig. 165.
Deep respiration. Fig. 201.
Arm-rolling exercise. Fig. 169.
Figure 8 movement. Fig. 170.

These exercises are used for a great variety of diseases in the joints of the elbow and of the upper and lower arm; such as chronic inflammation, straining of muscles, distensions, bruises, inflammation of tendons and its consequences, neuralgia in the upper and fore arm, weakness or disablement of the muscles of the arms, stiffness of joints, abnormal agglutinations in them, etc. Curative gymnastics are frequently preceded in such cases by massage. For further particulars on each single exercise, see ibid.

Curative Gymnastics: Group XI.

Raising the knee. Fig. 181.
Bending and stretching the knee-joint to the front. Fig. 182.
Lowering and raising the body. Fig. 184.
Deep respiration. Fig 201.

Bending and stretching the knee-joint to the rear. Fig. 183.
Mowing movement. Fig. 193.
Deep respiration. Fig. 201.
Foot circles. Fig. 176.

This group is employed for the removal of the various diseases of the knee-joint and muscles of the thighs and legs; as, for instance, articular neuralgia, neuralgia in the thighs or shins, affections of the sinews and tendons in these parts, etc.

If the patient lacks the necessary strength, the exercises must be performed with the aid of a support,—*e. g.*, holding on to the back of a chair—or in a recumbent position.

Great care must be taken, in performing the exercises, not to overdo the thing, (better too little than too much), and to allow sufficient intervals to elapse for the patient to recover his strength. Special attention must be paid in all these complaints to the application of massage and passive movements; the former must in many cases precede the latter, as well as the curative exercises generally. For further particulars on each single movement, see ibid.

CURATIVE GYMNASTICS: GROUP XII.

Stretching and bending the foot. Fig. 180.
Foot circles. Fig. 176.
Lowering and raising the body. Fig. 184.
Deep respiration. Fig. 201.
Mowing movement. Fig. 193 (To exercise all the muscles of the trunk.)
Trot movement. Fig. 200.

This last group is directed against the different affections of the foot joints, such as sprains, agglutinations, strain or thickening of the sinews and ligaments, and chronic morbid condition of the synovial or lubricating fluid (of the joints), articular capsule, etc.; further, against every other acute and chronic affection of the foot-joints, against neuralgia, and diseases of the muscles and sinews of the foot and leg.

Only the two first movements of this group are generally used in cases of sprains; and those two may, if necessary, be done in bed.

In all these ailments particular stress is to be laid on massage and the passive movements. In many cases massage must precede curative gymnastics or passive movements. (For details on each single exercise, see ibid.) The application of curative gymnastics is of service in other diseases besides those enumerated above, if the expert engaged in the case understands how to adapt the treatment to the individual.

Gymnastics, Indoor, see Index.

H.

HABITS, DISAGREEABLE. Many people are disagreeable to their fellow creatures in consequence of their having something personally unpleasant about them and being unaware of their condition themselves. in many cases they cannot help themselves, as these unpleasant peculiarities, owing to long neglect, have become a kind of second nature and tend to recur involuntarily.

If the attention of the person so afflicted is to be drawn to these habits or peculiarities (and it is the duty of every friend to do this) it must be done with great care and in the most friendly manner possible, or he will be turned into an enemy. A hint is often sufficient; the person in question understands at once, sets himself to correct the offensive habit, and is grateful for the well-meant advice.

Often, however, any hint of this nature is resented, and the utmost tact has to be exercised in order not to sever the bond of friendship.

Parents especially need to be reminded that they often make themselves obnoxious to many people on account of the bad conduct of their children, particularly when the latter are given to quarrelling, and have to be scolded and exhorted to good behavior. Children as a rule are objects of interest to their parents only. Other people frequently make a pretense of being interested in them merely for the purpose of ingratiating themselves with their parents.

The bad habits in question may be enumerated as follows:—faulty carriage of the body in walking, dancing, etc., grimaces while talking, immoderate laughter, etc., over-excitement and contentiousness in political discussions. in card or billiard playing, etc., sputtering in the act of talking; continual repetition of hackneyed and unmeaning phrases, as consequently "I said," "Said he," "Do you understand," "Don't you know," in conversation or public speaking, and so forth.

Nothing is more repulsive than having our olfactory nerves offended by other people. Some persons are afflicted with offensive breath; this arises in the case of healthy people from want of due attention to cleanliness of the mouth and teeth (these parts should be cleaned after every meal). Others are excessively addicted to the use of pomade. The clothes of some people carry about with them a prevailing odor of garlic, cigar stumps or nicotine. Others constantly smell of spirits. Individuals suffering from eczema, perspiring feet or armpits, etc., are also liable to be exceedingly unpleasant to their neighbors.

It is an unfortunate circumstance that evil-smelling persons are often quite unconscious that they are offensive to others.

The remedies to be adopted in such cases are great local cleanliness, *e. g.*, frequent rinsing of the mouth, nose and ears with fresh water, and washing of the feet and armpits, with attention to the proper condition of the skin by means of daily baths, ablutions, etc.

The appearance of hairs in the nostrils is always unpleasant especially when, as often happens, dried mucus or snuff, in the case of snuff-takers, clings to them.

Teeth, when they are kept white and clean, contribute to the beauty of the mouth. This is well known; nevertheless most people entirely neglect them and only begin to attend to them when it is too late. Every mother, therefore, out of regard for the welfare of their children, and the important part played by the teeth in the mastication and digestion of food, should train them in the habit of cleaning the teeth, and rinsing the mouth after every meal till it becomes a second nature.

People can also make themselves unpleasant to others by unbecoming songs, swaggering, sniffing, snorting, belching, spitting, smacking their lips while eating, making noises while swallowing, etc. A man should examine himself, or ask a friend whether he is addicted to habits of this sort; if so, he should earnestly endeavor to abandon them; a firm will is absolutely necessary for this.

Squinting, wens, warts or excrescences on the face and hands, growth of hairs on parts where they should be absent (especially with women), pockmarks, heat-spots, etc., may also be mentioned among the peculiarities which are liable to render their possessor disagreeable to other people. For their removal see under heads of the complaints in question. Galvanism may be recommended for the removal of superfluous hairs. Temporary success has been obtained in these cases by shaving, singeing or abstraction with a forceps.

Dr. *Bock* recommends *Boettcher's* depilatorium for the removal of superfluous hairs. It is prepared as follows:—thirty parts of freshly calcined lime should be slaked with twelve to fourteen parts of warm water; the precipitated lime should then be mixed with sixty parts of water, or with enough water to form a paste. A current of sulphuretted hydrogen is then directed to the mixture until the lime ceases to absorb the gas. A small portion of the paste, equal in thickness to the blade of a knife, is then applied to the hairy part; it should be allowed to remain for fifteen or twenty minutes and removed with a wet sponge. To counteract the unpleasant smell, five ounces of the fresh paste may be mixed with two and a half ounces of starch sugar and one dram of oil of lemons.

HAIR grows over almost the whole of the body. The hairs are formed in little pits, called hair follicles, in the cutis vera, and emerge with their excretory ducts from the surface of the skin.

A hair consists of the shaft (the portion projecting from the outer skin and tapering to a point) and a bulb-like root, contained in the follicle, the bulbus pili. The hair is developed from a small papilla of true skin at the bottom of the follicle. The papilla contains a network of fine blood-vessels which supply the nourishment to the hair. The hair bulb contains granules of a pigment, embedded in cells and supplying the coloring matter.

There is a great difference as regards the length, thickness, color, and quantity of the hair in various parts of the body. The hair on the head and pubes is longer and thicker than that on other parts.

HAIR CULTURE. Hair is a portion of our body; consequently "Culture of the hair" is equivalent to "Culture of the body." If due attention be paid to strengthening the body, the latter will be enabled to produce healthy hair.

A few hints on the care of hair may, however, find a suitable place here. Cleanliness is as essential to the hair as to the rest of the body, especially as dust and other impurities are very apt to collect in it. Daily combing and brushing with a moderately hard brush is necessary. Anybody who is willing to devote a proper amount of time to this object, and will not rest content with merely passing the comb and brush a few times through the hair in a desultory fashion, will not fail to notice that the hair will, after a short time, not only be cleaner, but will present a more attractive appearance. In addition to this daily brushing and combing, the head should be thoroughly washed from time to time—about once a week. For this purpose tepid water (68° to 77°) should be used; cold water should be avoided, as it does not remove dirt so thoroughly as tepid water, and is, moreover, liable to produce a rush of blood to the head, causing headache and other troubles. The hair and its roots should, therefore, be thoroughly washed with soap and tepid water, a few degrees colder water may then be applied and the head well dried. This last point is of great importance. If it be neglected, the water remaining in the hair evaporates, causing a liability to take cold which may easily lead to rheumatic pains. Care must be taken, on the other hand, not to rub too violently, as the irritation may also have the effect of drawing too much blood to the head, causing the same troubles that we have already mentioned. The best plan is to dry the hair gently with a soft towel and then, wrapping a second dry towel round the head, to sit in the sun, in a place free from draughts, till the hair is thoroughly dry.

The question remains whether any and what kind of grease is suitable for the hair. The hair naturally contains a certain quantity of grease secreted by special glands, which prevents it from becoming brittle. In most cases, however, this supply of grease is not adequate, and it may be necessary to supply the deficiency by using a little oil. Pure olive oil is the best for this purpose, and a little aromatic oil may be added. All other substances, especially pomades, should be avoided; the latter, particularly when they are used too freely, have the effect of closing the pores, which may result in the hair falling out. Even the use of oil should be regarded only as an exceptional expedient. The object to be aimed at should be by general and local strengthening treatment (stimulating head-packs at night) to restore the glands to a healthy condition, so that they may be enabled themselves to supply the necessary amount of grease to the hair.

HAIR, DISEASES AND LOSS OF. Loss of hair occurs frequently in old age, but it may also be the result of certain diseases, such as typhoid fever, skin diseases, etc., but more particularly of disorders directly affecting the nerves passing through the roots, also of scurf, herpes, etc.

GENERAL CAUSES.—Violent emotions, severe and prolonged brain work, especially when attended with anxiety and care, dissipated habits, severe illness, hereditary predisposition, erroneous treatment, and neglect of the hair. Loss of hair is found more especially in old age, as we have mentioned.

TREATMENT.—Removal of the cause, or treatment of the disease lying at the root of the trouble. Healthy diet and mode of life. Avoidance of all ointments—oil, soap, and pomade. All head-covering should be dispensed with as much as possible, as it interferes with the evaporation from the skin. (At any rate, only light material should be used.) Great cleanliness should be observed, the head being bathed regularly with water of 77° to 84°, and carefully dried to avoid irritation of the cranial nerves. In connection with the bathing of the head, we would recommend that women with long hair should loosen it, then dip the finger in water and rub the skin with it; in this way an electrical action is induced. For the better drying of the skin a small cap should be put on so as not to run the risk of taking cold; this should be done both in case of actual disease of the hair and as a preventive. Covering the head after washing is sometimes also advisable for men suffering from disease or weakness of the hair; a stimulating head-pack may also be applied at night on alternate days. A daily wet rubbing of the whole body with water of 73°, or a tepid bath of 89°, may be recommended on account of its strengthening and refreshing properties, also plenty of fresh air. General strength-

ening treatment is also beneficial in these cases. In case of sycosis, herpes, scurf, etc., three or four box steam-baths or steam-baths in bed a week should be taken, the latter to be followed by a pack and bath with affusion for the head. For Modes of Application, see Index. For gray hair, see Index.

In addition to the constitutional treatment, *Kneipp* recommends washing the head with a decoction of stinging nettles or nettle-spirit.

HAIR-DYES. The preparations commonly sold are highly dangerous, as they generally contain lead salts; through their regular use a considerable quantity of these combinations of lead are introduced into the body through the skin, and may lead to chronic lead poisoning. That the preparations containing nitrate of silver, formerly considered harmless, are really injurious is proved by the following instance, related by *Bresgen*. A man had acquired the habit of coloring his beard with a strong solution of lunar caustic (nitrate of silver). The consequences of this became evident in a few years. His cheeks became of a grayish blue color with a tendency to get black, and he suffered from great depression, giddiness, loss of memory, pain in the back of the head, singing in the ears, weakness of sight and hearing, and chronic gastric and abdominal catarrh. The cause having been ascertained, the use of the dye was discontinued, and the above symptoms disappeared, with the exception of the blue color in his cheeks, which had become firmly established.

HAIR, FALLING OUT OF THE (Alopecia). In this malady the hair falls out in a peculiar way. The disease, which at first always attacks the skin of the head, commences by affecting a small circular spot on the top: this part becomes completely bald, the skin either retaining its original character or becoming glossy and brittle. The neighboring portions, which are still covered with hair, are usually scaly.

As the disease progresses, the circular bald spot at the top of the head becomes larger, and may, at last, result in complete baldness; even eyebrows, eyelids, beard, etc., becoming affected.

TREATMENT.—By a rational mode of life and especially a strengthening treatment (see *ibid.*); strict avoidance of spirits and similar beverages, such as brandy, strong beer, wine, coffee, etc., this disease may be arrested in its course. Lukewarm (77° to 86°) head lavations are, however, indispensable.

At present, different opinions prevail as to the causes of alopecia; some think that it has its origin in the nerves, others ascribe it to a fungus which destroys the hair.

CURE OF ALOPECIA.

(From THEODOR HAHN'S book, "The Paradise of Health.")

I had originally an abundant and luxuriant crop of hair. In the year 1868 it suddenly began to fall out in large quantities in front. I never applied anything but pure water to my hair, except on Sundays, when I used a few drops of hair oil. It gradually fell out to such a degree that, even when I only rubbed a little water into it, my hands and my comb were covered with hair. I treated it just as I had done before. Some time later I was induced to become a vegetarian, after the doctors had brought me so low with their "high art" (treating me for gastric, abdominal, pulmonary, and nervous complaints) that I could hardly walk. After following the prescribed diet strictly for six months, during which time I lived on scarcely anything but bread and farinaceous food, not only was my condition so improved that all my acquaintances were astonished at the change in my appearance, but I made the agreeable discovery that my hair had all at once stopped falling out. Whereas formerly comb and hands were full of it, I find now only a few stray ones, perhaps five or six, and it has remained so ever since. What but a rational mode of living can have produced this favorable change?

It would be interesting to learn whether this remedy has the same effect upon other people. If so, it would be a feather in the cap of vegetarianism, for this point has never yet been touched upon, as to my knowledge.

Bozen, January, 1873. *Georg Stier.*

I may supplement this case by adding, that Mr. *Stier* came to my Sanatorium completely exhausted and at death's door. He was racked with hectic fever and exhausting diarrhœa (five to twelve times within twenty-four hours) which had pulled him down to such an extent that for several weeks I expected every day he would die. The treatment I adopted, consisting in wet abdominal compresses, enemata, partial baths, and the strictest vegetarian diet, saved him. A severe chronic gastric catarrh, apparently accompanied by ulcers of the stomach, induced me to keep him to a farinaceous bread and milk diet a few months longer, until he was finally out of danger. At the end of September, he left me heavier in weight by about twenty pounds, and, like another being, to spend the winter in Bozen.

I have observed the beneficial effect of vegetarianism upon baldness, upon which Mr. *Stier* comments, not only in his case, but in many other patients, who have undergone my vegetarian treatment. A rational mode of living, whether applied generally or in particular, cannot but have a favorable effect; what is good for all, must also benefit the individual's

hair, which, like every other part, organ, or tissue of his body, is nourished by one and the same blood. If this be pure, healthy, strong, and nourishing, the tissues formed from it must be perfect and sound.

HAIR, GRAY, arises from cessation of the supply of coloring matter, without which all hair is naturally white. Grayness occurs first on the temples, spreading subsequently over the beard and the remainder of the head. This process occurs naturally in old age, but it frequently sets in gradually earlier in life, in consequence probably of powerful mental emotions, excessive brain work, dissipation, headaches, etc. It is also said to be hereditary.

A strictly healthy mode of life can arrest premature grayness, and even restore the natural color to the hair.

Hairs, Removal of Superfluous, see under "HABITS, DISAGREEABLE."

Half Bath, see "SHALLOW BATH."

Half Pack, see Index.

Half Steam-Bath, see Index.

Ham Dumplings, see "DIET."

HAND, DISEASES OF THE. Dr. *Reibmeyer* says on this subject in his book "Mechanical Exercise and Massage:" In the cure of many diseases relating to the indispensable and complex mechanism of the hand, the importance of the exercises in Group IV cannot be overestimated. Nowhere is the fact more patent how, on the one hand, massage first renders the introduction of certain movements possible and, on the other hand, how great and striking is the share which these movements have in a final and radical cure. In the first place come acute and chronic inflammation of the sheath of the tendon. The acute form can only be treated by massage, after the suppuration, sometimes accompanying the disease, is over, while active movements are commenced some days later. Next, sprains of the hand and finger joints, and the consequences resulting from them, must be mentioned. These movements constitute an integral part of the treatment by massage in every form of cramp, including that from which writers, seamstresses, pianists, violinists, etc., suffer, and, on a smaller scale, in all cases of partial paralysis of old standing, St. Vitus's dance, hysterical contraction and paralysis of the hand, etc., in all of which diseases the passive movements are first to be employed, and afterwards, and by degrees, the active ones according to the patient's progress. The above-mentioned Group IV consists principally in stretching and bending the hand, circular movements of the same to right and left, the figure-"8" movements, various finger-exercises, stretching and bending the fingers, etc. All these movements are illustrated in *Reibmeyer's*

book. (For the figure-"8" movement and stretching and bending the fingers see Index.) Under certain circumstances also hand steam-baths, cool wet rubbing, and soothing or stimulating packs, etc., may be applied. See also "WRITER'S CRAMP."

HANDS AND FEET, SWEATY (MOIST HANDS). Nature has in these cases for some reason or other, but especially in consequence of insufficient care of cutaneous action, chosen the hands and soles of the feet (there exist, as is well known, in those places many more and much larger pores than in any other part of the body) or the hands alone as the places of excretion. There is, therefore, no normal excretion or evaporation.

TREATMENT.—The most assiduous attention is to be paid to the action of the skin by a daily, or about four lukewarm (86° to 90°) baths per week, or tepid (73° to 77°) wet rubbing of the whole body. Also wash the body with soap now and again (water, tepid), so as to open the closed pores and enable them to act. Walking barefoot at a suitable season is especially recommended, despite the ridicule a man incurs by doing so, or, at all events, wear lighter and more airy foot gear.

A complete cure can only take place gradually.

If it should be desired to apply some local treatment besides, the point is, in the first place, to invigorate the relaxed sweat glands. To this end the feet, or, as the case may be, the hands, are daily dipped four to five times in water of 61° to 66°, and, afterwards, rubbed vigorously with a coarse towel. By degrees, as they commence to feel warmer and have got used to this kind of cooling, the baths are taken a somewhat longer time.

Or a beginning may be made with short daily baths (90°), and gradually reduce them to 58°. Vigorous friction of the hands or feet, as well as bodily exercise, must always be ensured.

ANOTHER TREATMENT.—One or two steam-baths or steam-baths in bed weekly, the latter followed by full pack, but both to be succeeded by a lukewarm (88°) bath, in order to enable the skin to exhale. An 86° foot-bath or, as the case may be, hand-bath of from five to eight minutes, may be also applied in the evening, and a (58° to 66°) wet rubbing of the respective parts in the morning.

Massage of the whole body is recommended. Exercise after it.

The second treatment has a more rapid effect. For Modes of Application see Index.

Hand, Swollen, see cure under "SWELLINGS."

HARDENING. By "hardening" the constitution we mean making it capable of resistance, especially to cold, and of remaining unaffected by unfavorable weather.

In commencing a hardening treatment, however, the patient's age, sex, habits of life, and, above all, the condition of his nervous system must be taken into consideration.

TREATMENT.—The desired degree of hardening will be attained by daily cool or lukewarm ablutions and rubbing of the whole body if persevered in for some length of time, or by baths, together with the use of a moderate amount of clothing and bed-covering, having regard constantly to the constitution and nervous system of the patient. (The best means of hardening the system are, however, short, cold ablutions and baths of no longer than a minute's duration.)

a. Commence with lukewarm ablutions, gradually reducing the temperature till the water is cool. In the case of individuals not suffering from weak nerves, the whole body may be rubbed with water of the same temperature.

b. Baths (91°) at the beginning, with cool affusions to be taken two or three times a week.

c. Swimming baths of at least 71° may be recommended, also river baths of the same temperature in summer, duration two to four minutes. The bather should move vigorously all the time he is in the water.

It is not necessary to rub oneself dry after these baths. Exercise should be taken in the sunshine or in warm air till all moisture has evaporated from the body.

d. Walking barefoot is a simple and natural means of hardening the system.

Children should always walk barefoot.

Anxious parents who are afraid to follow this advice should, at any rate, see that their children wear boots and shoes which admit of the fresh air coming in contact with the skin.

Children who can already stand and walk know how to help themselves. They throw away the troublesome and uncomfortable shoes and stockings without the slightest compunction and are quite happy immediately, especially in spring, when they are allowed to romp about as they please. Poor children are rarely interfered with in this pleasure. Less fortunate are the children of the rich. Prudent parents residing in towns and not possessing gardens should allow their children to walk

barefoot at certain times and in certain rooms or passages, so that their feet may at times be quite free from covering and exhale properly; may absorb fresh air and move about in it like the face and hands.

Grown-up people of the poorer classes often walk about in the country barefoot, and do not grudge the richest dweller in the towns the instruments of torture which he calls his boots, however elegantly the latter may be fashioned and polished.

Grown-up dwellers in towns should walk up and down in their rooms from ten minutes to half an hour at a time immediately before retiring to rest or after rising in the morning, and in order that no discomfort may be experienced from commencing this practice too suddenly, at first in stockings, afterwards with bare feet. Before taking these walks the feet should be dipped for a few minutes in cold water up to the ankles.

Before walking barefoot, also before walking in water or on grass, care must be taken that the feet are thoroughly warm. If they are cold, they must first be warmed by rubbing or by a short warm foot-bath. During the cold season these applications should be continued only for a short time, two minutes at the commencement.

A specially beneficial kind of barefoot walking is walking in wet grass. The wetter the grass, the longer and more often repeated the exercise, the greater will be the benefit derived from it. As a rule, the duration of one of these walks should be about a quarter of an hour.

After the walk, any sand, grass or dirt should be at once removed or washed from the feet, and dry shoes and stockings put on while the feet are still wet. Then a walk should be taken, starting off at a rapid pace, which may be gradually reduced. The duration of this walk will depend on the rapidity with which the feet get dry and warm and should not exceed a quarter of an hour.

e. Walking on wet stones has an effect somewhat similar to that of walking in wet grass. A larger or smaller piece of stone paving will be found somewhere or other about every house. One can run rapidly backward and forward in a long passage: on a small piece of paving one can tread the stones as the vintner treads the grapes or the baker's apprentice treads the dough in many places. The essential thing is that the stones should be wet and that one should not stand still on them, but walk or run with tolerable rapidity. A jug or watering-can can be used and a fair amount of water employed in making as broad and long a water path, as space may allow, and the water should be spread by the feet.

When used for curative purposes the duration of these applications should not exceed three to fifteen minutes. As a rule, from three to five

minutes will be sufficient. Patients suffering from cold feet, throat troubles, catarrhs, tendency of blood to the head with consequent headache, should take these "wet stone walks" frequently.

f. A still more powerful effect will be obtained by walking in fresh snow for half a minute.

g. Walking in water. It may appear a simple matter to walk in water reaching to the calves; this is nevertheless an excellent means of hardening the body. The patient may commence with moving about in a large bath with water enough to cover the ankles. The action is more powerful if the bath be filled with water reaching to the calves, and still more so when the water comes up to the knees. In the case of feeble patients it is best to commence with lukewarm water and gradually reduce the temperature till the water is quite cold.

h. For hardening the extremities (arms and legs) the following process is recommended by Kneipp: The patient should stand in cold water reaching up to or over the knees, not longer than a minute. After putting on his shoes, he must next bare his arms to the shoulders and hold them for a minute in the cold water. If possible both these processes should be performed at the same time, which presents no difficulty if the bath be long enough. A convenient plan is to stand with the feet in a vessel on the ground while the bared hands and arms are put in a wooden tub resting on a chair. A necessary condition of this application is that the body should be warm.*)

i. The knee-affusion as well as other "Kneipp" affusions are well adapted for hardening.

k. On going out of a warm room into the cold air in raw or cold weather it is a good thing to drink cold water, in order to strengthen the respiratory organs and to make them capable of resisting the effects of cold air. Many colds may be avoided in this way both with children and adults. Breathing should be performed through the nose.

l. Vigorous exercise, such as gymnastics, swimming, etc., are conducive to the hardening and strengthening of the body. See "MASSAGE" and "CURATIVE GYMNASTICS."

Infants and small children may be strengthened by pouring a jug of water over them on the conclusion of their daily bath, the water from the jug being a few degrees colder than that used in the bath (96° to 91°). This, however, must not be done till a fortnight after birth, and the temperature must be somewhat higher at first and gradually reduced. Dr. *Baumgarten*, of Wörishofen, advises that children, after the first week of their life, should be dipped for a moment in water of 82° to 73° after every bath.

Hardening the body must be regarded as one of the most important aids to health and strength, and a sovereign means for rendering it capable of resistance to injurious influences. In former times much less was heard of the necessity for hardening the constitution. The reason of this was not merely that little attention was paid in those times to national health and public hygiene, and that little interest was taken in these matters, but that the necessity for drawing attention to the importance of hardening did not exist to the same extent, as the conditions of life in those days were naturally adapted to "harden" people. It will be enough to remind our readers of the method of travelling in the days before the invention of railway trains and steamers. How many men and women, and even children, were employed more or less regularly as messengers, and got the opportunity of hardening themselves by travelling along almost impassable roads, in every kind of weather and often for hours without a halting place! Not only villagers, but dwellers in towns were accustomed to long journeys on foot, with only a moderate amount of clothing, and freely exposed to air, sunshine, and rain. It can be readily understood that laborers whose duties compelled them to walk long distances, and all pedestrians must have had abundant opportunity to harden themselves under such conditions! At a time when workshops were never heated, when there were no double windows, when servants and many others slept in icy cold attics, and when warming pans were used only by elderly people, opportunities for hardening were not lacking. In those times, moreover, the housework, even in families of good position, was much harder than now, so that servants were compelled to get hardened. In those days the popular recipe for the prevention and cure of anæmia and weakness in young girls was plenty of bodily work at home, and the universal medicine was—plenty of open-air exercise in all weathers without any anxiety about catching cold.

Since the conditions of life in the present day do not offer such opportunities in the same measure, the hardening process must be performed systematically by means of baths, wet rubbings, swimming, gymnastics, etc. . Notwithstanding this artificial hardening and strengthening, most people have a dread of heat, cold, wind, and rain when they walk abroad, and a walk in the country, even with a pleasurable object in view, is too much for them. This is the case not only among the well-to-do classes, but even among the poor. Nowadays most people have a positive dread of bodily exercise.

Just because the altered conditions of life in the present day exact

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*) **Anæmic and nervous patients should first undergo a preliminary treatment, to restore the process of assimilation to its normal condition. In these as in all other cases it is necessary to individualise.**

more brain work than in earlier times, no one should neglect bodily exercise, and give way to laziness and luxurious habits. Only in alternating mental and bodily exercise, work, and repose can a man develop naturally and remain in good health. See also "HARDENING" in Index.

HARE-LIP AND CLEFT PALATE. Hare-lip is a deformity from birth, in which the upper lip is split or divided, either partly or as far as the nostrils. Another deformity of the cavity of the mouth is *cleft palate.* This is a division of the roof of the mouth and is, as a rule, found in conjunction with *hare-lip.* Both deformities can only be corrected by operation. The edges of the fissure are lacerated and then sewn together. The operation is most successful when performed about a year after birth, and should remove difficulty of mastication, indistinct pronunciation, and the deformity.

To enable the child to take its milk and prevent the loss of the fluid through the nostrils, it is expedient to insert into the child's mouth a broad teat to cover the fissure while it is at the breast or taking its bottle.

Hare Roast, see Index.

Hay and Hay-Flower Baths, see Index.

Hay and Hay-Flower Shirt, see Index.

Hay and Hay-Flower Wrap, see Index.

HEADACHE. In no complaint are the causes more various, and, therefore, more difficult to determine, than in headache. The head is drawn into sympathy even by irregularity in the circulation of the blood or by disturbances of the digestive organs, constipation, irritation of the brain, etc., etc. There is no pain which so frequently occurs as headache. It accompanies almost every disease, whether febrile or not, but especially the former, and when there is a determination of blood, as a premonitory and accompanying symptom, in digestive disorder or diseases of the intestines in hysterical or hypochondrical conditions, with anæmia and hyperæmia, etc. Sometimes, indeed, it occurs independently of any other disease.

General Description of Headache.—Headache may be but transitory and of moderate severity, or it may be constant and very violent; it may be permanent or decrease temporarily; it may assume the most varied phases, and increase from mere discomfort to such an intolerable degree as to cause desperation and madness; it may be transient or last for a long period, even for a whole lifetime. Some persons are afflicted with unintermittent headache from their earliest infancy, and never get rid of it either in youth or in old age. Headache, too, may attack only a small part, *e. g.*, the forehead, temples, eyes, or one side of the head (par-

tial headache), or it may take possession of the whole head, including even the bones.

Causes.—The most various kinds of diseases, as well as deposits of morbid matter in the head, *e. g.*, in smallpox, measles, typhoid fever, syphilis, and other complaints.

Moreover, external violence on the head, foreign bodies in the ear or the nose, stings from insects, sunstroke, bright light, strident sounds, physic and particularly narcotics, constipation, strong emotions, especially anger, sorrow, joy, abundant growth of hair, too little hair, dyeing the hair, recumbent position of the body, and, consequently, sleeping in close rooms and in such which are filled with the smoke or vapor of burning coal or other strong smells, and also in newly white-washed rooms. Other causes are, want of sleep, or sleeping too long or at unusual times, waking suddenly, irrational application of electricity or galvanism, drunkenness, overloading the stomach, excesses, taking too much to drink, particularly too much alcohol (fermented liquors), partaking of unwholesome food and drinks, such as adulterated wine, beer, sweets, etc.; worms, notably tape-worm, defective condition of the bile, empty stomach, flatulence, waste of semen, as in sexual intercourse carried to excess, or self-abuse, etc.; irregular menstruation, suppressed hemorrhage, or other discharges, to which the system has become accustomed, such as bleeding at the nose, foot-sweats, piles, discharge from the ears, etc. Suppressed itch, impetigo, ulcers of long standing, and the like causes, may also produce headache. Sometimes, notably with women, lingering gastric inflammation causes protracted headache. If headache increases with a horizontal position of the body, it points to hyperæmia of the brain and to all conditions in connection with it, such as inflammation of the brain, whereas a headache, which is most violent in a vertical position of the body, indicates anæmia of the brain.

Headache caused by diseases of the brain and its tissues is always more deeply seated; it does not increase with pressure, but sometimes with stooping or turning round, suddenly shaking the head, rising quickly, holding the breath, vomiting, coughing, sneezing, and especially with mental exertion.

Treatment of Headache in General.—In the first place remove the cause which induced that particular form of headache. Next, promote open bowels by means of enemata; take as well two or three small detergent enemata. See that pure fresh air is in the room, sleep with the window open, take physical and mental rest, moderate exercise in the open air, practise breathing exercise, and indulge in cheerful conversation. Keep away from all noise. Apply cold, cool, or tepid head-compresses (select those most suitable), in many cases combined with a

detergent treatment, etc. Rub the temples continually for some time with the hands dipped in cold water. Regular action of the skin to be ensured by a daily wet rubbing of the whole body, lavation or bath, and vegetarian diet. Drink cold water. The adoption of these measures, even if the primary cause of the headache be unknown, will more or less mitigate, if not altogether remove it.

Headache is sometimes soothed by pressure of the hand on the head, or by a fairly tight bandage round it; also by lying with the head somewhat raised or in a sitting posture, or, again in other cases, by keeping the head in a lower position than the body, and the feet warm. A transitory headache is often mitigated and dispelled by opening the bowels by means of a lukewarm (77°) enema.

For cold feet, take warm foot-baths, foot steam-baths or foot steam-baths in bed coupled with, according to circumstances, cold, cool, or tepid head-lavations or compresses, followed by vigorous friction of feet and legs, or a tepid (72°) wet rubbing of the whole body. Steam-baths in bed or partial steam-baths, either daily or three or four times a week, succeeded by a bath and thorough washing of the head, has a most excellent effect in many cases. For a chronic headache apply (besides derivative treatment consisting of foot-packs, etc., in the night) partial or wet rubbing of the whole body in the morning and enemata. Fresh air and tranquillity of mind, likewise lukewarm (83°) hip-baths of from five to eight minutes' duration are to be recommended; but for acute headache a detergent treatment, combined with soothing compresses on the head. Above all, it is necessary to pay attention to the primary complaint and cause of the headache, because a genuinely permanent cure can only be effected by their removal. If the headache is congenital, it is better to apply a strengthening treatment.

Treatment by Massage.—For headache caused by a determination of blood to the head, vigorous massage of the neck, as well as energetic downward stroking and friction, applied to the neck, shoulders, and back, and kneading the arms and legs, is the most appropriate treatment.

In cases of nervous and anæmic persons suffering from headache, stroking the forehead and the region of the temples has a highly soothing effect. (See also Fig. 202.) In cases of chronic headache, massage treatment (regard being had to the cause) is most effective, as indicated under "Strengthening Treatment."

If determination of blood to the head is the cause of headache, the application of Group VII of curative gymnastics is also recommended. (For Modes of Application, see Index.) See also "Kneipp Cure." In order to have some knowledge of the cause of the particular headache, and to hit upon the right form of remedy in consequence, it is necessary

to be acquainted with the difference between the various kinds, and for this purpose I give a more detailed description of several kinds of headache.

The chief kinds of headache are the following:

1. **Gastric Headache,** which is due to the stomach being out of order. The tongue is covered with a bitter, viscous phlegm; the patient complains of pressure on the forehead, and of lassitude, his face is pale, cheeks flushed, and the lateral nasal cartilage is tinged with yellow (a few drops of blood generally issue from the right nostril), the breath is offensive, the bowels act badly, the urine is thick and cloudy. The patient also suffers from slight cough, feeling of sickness, vomiting, and piles. The causes are, faulty diet, eating viands unfit for consumption, worms, acid bile, strong emotion. This form is mostly found in very sensitive persons and in those who are accustomed to a sedentary mode of life.

TREATMENT.—Avoid the causes. Next, steam-bath in bed, No. 1, daily or every other day, of from an hour to an hour and a half duration, then tepid (72°) wet rubbing of the whole body and particularly washing the head with the bare hands. Abdominal compress and leg pack at night and enemata for hard bowels as well as for detergent purposes. Light, very limited vegetarian diet. As much walking exercise in the open air as possible, pure air in the room. Sleeping with open window. Washing the head to be repeated if there is no relief, in doing which the hand is to be dipped very frequently into water of 72°. See also "TREATMENT OF HEADACHE IN GENERAL."

2. **Rheumatic Headache.** Persons are affected with this form who are otherwise not subject to headache at all. It mostly comes after rheumatism of the eyes, teeth, gums, neck, or extremities, and there are no definite symptoms. It is a violent splitting headache and torments the patient day and night. In rheumatism of the scalp pushing the skin out of its place is productive of pain.

The headache is generally increased by violent exercise, shocks to the system, effort to stool, by stooping, coughing, and sneezing. It usually commences with a sensation of stiffness and contracting pains in the neck, which spread over the whole head to the brow. The patient is generally extremely sensitive to touch in the hairy part of the head, as if the hair itself were painful; the pain is also associated with a distinct throbbing. The pains diminish at times for a short period, only to begin again with redoubled violence.

The aching in the muscular (fleshy) and sinewy parts of the skull is of a racking, bursting or drawing kind and is similar to rheumatic

headache. It increases particularly with pressure and movement, chewing, nodding the head or frowning.

TREATMENT.—When the approach of an attack of this kind is noticed, an endeavor should be made to perspire by vigorous exercise in the open air, steam-bath followed by (77°) jet or spray on the head and warm head packing. Massage (the pains increase at first, but afterward gradually diminish). If there is a congenital disposition, sweat-cure must be repeatedly applied, especially steam-baths, and a non-stimulating diet observed. Rubbing the head with the bare hand dipped frequently in cold water should be continued till the pain has abated and be repeated if the pain comes on again. A steam-bath in bed, or simply a steam-bath followed by full packs to be taken every day. Both must be succeeded by a lukewarm bath (88°) with head affusions or douche. In the case of constipation enemata to be given; also smaller ones for detergent purposes. Frequent walking exercise out of doors, fresh pure air in the rooms, sleeping with the window open. With this treatment the headache will usually disappear within a few (two or three) days.

3. **Nervous Headache** and pains in the scalp come on in periodical attacks. To this class belong all those kinds of headache which accompany menstruation, or arise from mental excitement and weakness; also those that attend hysteria or hypochondria. The pain is at one time dull or violent, at another racking or burning; often ceases for a time, and appears in fact, as before mentioned, fitfully. Pressure on the painful place or affected nerve, and combing the hair upward increases the headache.

TREATMENT.—Partial or foot steam-bath in bed, duration according to the patient's wish, cooling the head frequently by dipping the hands in cool water, and washing the whole head and neck; omit this if it does not agree with the patient. Then should follow a lukewarm bath (88°) with affusion, particularly of the head. Enema when constipated. Plenty of outdoor exercise, fresh air in the room and sleeping with the window open. At night abdominal compress and leg or foot pack with wet rubbing of the whole body (73°) in the morning, also wash the head frequently in lukewarm water (86°) with bare hands, soft flannel or soft brush. A weak galvanic current may also be applied for one or two minutes, and inductive electricity often does good; magnetism may also be applied.

4. **Headache with Cold Head.** Affusions on the occiput (88° to 92°), stimulating (88°) compress on the neck, kept on to relieve vascular spasm.

5. **Inflammatory Headache, Caused by Determination of Blood to the Brain.** Its characteristics are pressing, throbbing, drawing, or racking pains, violent throbbing in the temples and veins of the throat, noise in the ears, lustrous eyes, painful sensation in the orbital cavity, dryness in the nose, etc. Moreover, it comes on frequently after meals, and even after drinking a moderate quantity of fermented liquors, and increases as the temperature becomes higher or lower.

The causes are generally mental excitement, such as anger or delight, sunstroke, spirituous liquors, suppressed hemorrhage, and other unnatural irritations of the brain. To this class belongs also the headache with which children and plethoric young people are affected.

TREATMENT.—Avoid the cause. Take hip-bath of considerable duration (an hour or more). Foot steam-bath with cooling head-compresses. For the rest, the same treatment as in nervous headache.

Plethoric young people should take plenty of exercise, not sleep too long, observe a non-stimulating diet, and always maintain open bowels by means of enemata if necessary.

6. **Headache Associated with Rheumatic Gout in the Head** is usually of a violent nature and affects the whole head, even the bones of the skull, and may rage for a considerable length of time. Or, again, it may be periodical and located in only one part of the head. It is connected with gout, especially with suppressed gout, but is caused also by recession of erysipelas, piles, fluor albus, herpetic eruptions, habitual perspiration, and the like.

TREATMENT.—In the first place must be adopted to the primary cause. Otherwise, as in rheumatic headache.

7. **Intermittent Headache,** combined with so-called latent intermittent fever, usually attacks the head every day, generally in the morning, at a particular hour, often as early as three or four o'clock, and rages for from one to two or even eight to ten hours. If the attack is very violent it generally lasts only a short time, but when of a mild character it is often of long duration. The attacks also sometimes return in the afternoon. The pain chiefly affects the left side of the head.

TREATMENT.—Rest for the body and mind, sitting position, avoidance of all noise and glaring light. A three-quarter steam-bath in bed, the head being cooled at the same time with the hand dipped in cold water, or by compresses to be changed on getting warm. Wet rubbing of the whole body (73°) follows the bath, in which likewise the head is to be washed with the bare hands. Detergent enemata, abdominal compress by day (duration two or three hours) to be repeated at night and left on unless it proves irksome. Stimulating leg-packs may also

be added at night. The intermittent fever must be treated simultaneously.

8. **Hemicranial Headache.** (Migraine.) This affection which attacks all ages and both sexes (the female more frequently than the male sex) is distinguishable by the suddenness of its attacks, sometimes the left, then the right side, at other times the front or the back part of the head being more or less affected. The pain racks the patient for a few hours, or even for half or the whole day, but rarely longer. In most cases vomiting takes place when the attack is at its worst, after which the patient falls into a beneficial sleep of several hours' duration, from which he awakes free from the pain. These pains generally return every three or four weeks, unless they are cured or mitigated in the interval.

Symptoms.—Sometimes there are certain premonitory symptoms, such as shivering, feeling of sickness, giddiness, incapacity for concentrated thought, irritability, morbid hunger and yawning, etc., next violent boring, pressing, bursting and heavy or dull pains, located in any part of the head; the sense of hearing and sight is extremely delicate, on which account the patient, in order to avoid sensuous impressions as much as possible, prefers to be in a dark, quiet room. Bodily and mental debility, depression, indifference, feeling of sickness, spasmodic yawning, and even cold shivers are also present. The affected side of the face is sometimes pale and shrunken, the ears cold, and the pupils enlarged; or may be hot, red and swollen, the temporal veins distended, pulse rapid, the white of the eye red, the pupil contracted, the eye itself watering and painful.

The causes of this affection are as yet but imperfectly established; the fundamental reasons seem to be disturbance and irregularity in the circulation of the blood, or rather stagnation of the blood in the brain, and it is probably intimately connected with some gastric complaint (stomach, liver, bile, etc.) and with an irregular blood circulation of the whole organic system. It may also arise from anæmia of the brain, etc., from irregularities in menstruation, morbid condition of single nerve trunks, or general irritability.

The female sex in general, and young people, are more liable to be attacked than other persons, and it appears that congenital predisposition may be a cause of it.

Treatment.—A tepid wet rubbing of the whole body (73°) in the morning, and about four three-quarter steam-baths in bed a week, followed by a lukewarm bath (88°) and washing and douching of the head. A lukewarm hip-bath (80°) daily, duration of fifteen minutes. Abdominal compresses and leg-pack at night as well as enemata for constipation, and

as detergent fresh air out of doors and indoors sleeping with the window open. Avoid feather-pillows and strong draught. Relief from the pains may be obtained by electric treatment given professionally, massage and stroking the forehead vigorously, with the patient's eyes closed. For chronically cold feet, apply foot steam-baths.

Hemicranial headache is also said to be soothed and cured by continually applying about five cold affusions daily until an unpleasant sensation is produced every time. If there should be no water laid on in the house, a small watering can may be used for the treatment, and the spray of water applied directly on the affected place. Several small cold enemata are given daily in connection with this application as a detergent for the intestines. To ensure a complete cure of the affection, this treatment must often be continued for some length of time.

Massage by Stroking for Migraine.—The application of massage, according to Dr. *Reibmeyer*, consists, for nervous persons and such as are affected with anæmia, in moderately stroking the forehead with both thumbs in the direction of the temples (see Fig. 202), and in equal downward strokes of the whole scalp with the fingers; but if the patient is plethoric and in cases of determination of blood to the head, in vigorous massage of the throat and kneading the arms and legs. See also the accounts of cures effected which follow this article. Headache is also present with inflammation of the brain, the pulse is then quick, full and hard and the face flushed; chronic cases are attended by great excitement and sleeplessness.

9. **With Anæmia of the Brain,** headache is accompanied by fainting fits and palpitation of the heart, nutrition is completely disturbed, the mucous membranes have a pale appearance. The pain commences when the stomach is empty and disappears after a meal.

Massage for Migraine.



Fig. 202.

10. **With Cerebral Tumors** the headache continues for years without interruption, beginning early in the morning; vertigo and paralysis appearing at the same time.

11. **In Bone Swellings of a Rheumatic Nature** painful protuberances appear on the forehead and the scalp.

12. **In Syphilitic Swellings of the Bone,** violent, piercing pains take place at night, when the patient lies warm in his bed, in consequence of the swellings on the inner surface of the skull. The following facts should be considered.

The most usual headache is ***dull*** and ***pressing,*** and may accompany any affection, but especially diseases of the brain.

Pricking Headache manifests itself in cases of anæmia, nervous irritability, and in inflammation and cancer of the brain.

Throbbing Headache is produced by hyperæmia and tumors of the brain; also in cases of anæmia and hysteria.

A Boring Headache occurs in severe diseases of the cranium or brain, and in purely nervous conditions.

Racking Headache is mostly connected with affections of the external parts.

CURE OF HEADACHE.

(From Pastor König's book, "The Natural Method of Healing.")

A letter written by Frau *Ottilie Fischer,* wife of a Magistrate of Berlin, to the Rev. Mr. *Koenig.*

Reverend and Dear Sir!

It gives me great pleasure to be able to inform you that I have entirely got rid of the headache, from which I have been suffering for years almost uninterruptedly, by means of a three weeks' treatment according to the Natural Method of Healing as you prescribed for me. Expressing my sincerest gratitude to you for the same, I remain, etc., etc.

A SECOND CASE FROM THE SAME BOOK.

My wife was, and is even now at times, suffering from violent nervous headache, which almost developed into spasms of the head. When this malady made its appearance, I applied Herr Pastor *Koenig's* natural method of healing, and her pains disappeared in a few hours. This result has convinced me that the affection would cease entirely in time, if my wife were treated systematically and with observance of a proper diet. Anybody who knows what a nervous headache is, lasting as it often does for days, and torturing the patient, will appreciate this beneficial and simple method. *N. N.*, Berlin.

CURE OF HEADACHE AND GIDDINESS.

(From Theodor Hahn's book, "The Paradise of Health.")

My wife suffered for many years from giddiness and violent headache (which returned every three or four weeks), combined with sickness and vomiting, to such an extent as to be obliged to remain motionless with eyes closed for two or three days while the attack lasted, lying in her bed without taking the slightest sustenance, food of any description being repugnant to her. Now, however, that she has changed her former diet and adopted a vegetarian regimen, her former troubles have entirely left her, and she at present enjoys perfect health.

F. Hocker.

CURE OF CHRONIC HEADACHE.

(From Prof. TRALL'S book.)

The Rev. Mr. *Hunting*, of L. I., had suffered periodically from headache from his infancy. The attacks were most violent, and were attended with choking and vomiting. In consequence he was generally incapable of doing any work for three or four days. They returned regularly every five weeks. After entering my Sanatorium he had only one more attack, and in three months' time was cured of all susceptibility to the malady.

CURE OF CEPHALALGIA.

By EDMUND SCHNECKENBERG.

Cephalalgia belongs to the rarer complaints, and yet, during the last twelve months, I have twice had the opportunity of treating it with eminent success. A gentleman weighing nearly 250 pounds was tortured for a year with the most excruciating cephalalgia; the attacks came on more and more frequently as time went on, and became so aggravating that the poor man could not go to business for days together. He was confined to his room, as the pains grew so intense as to disturb the normal action of his sight and hearing. Chronic cold feet and legs and constipation attended the affection: they were, however, not the cause but the effect of the malady. The cause lay in the digestive organs. After a twenty days' treatment he returned to his home perfectly cured, and now, after six months, enjoys undisturbed health. A short time ago he paid a visit here, just as a second patient was being treated for the very identical complaint.

This patient was allowed a mixed diet. To increase the circulation of blood in the feet, partly leg steam-baths and partly warm foot-baths were applied with succeeding vigorous massage of feet and legs.

Partial and afterward three-quarter packs were given, to regulate the general circulation of the blood, and energetic massage of the abdomen applied to strengthen the digestive organs, while systematic hill climbing (in the depth of winter) helped to invigorate the heart's action. It may be easily realized that, as a last resource, breathing fresh mountain air day and night could not but have a favorable effect. I did not apply partial and hip-baths, for the reason that my bathing apparatus was altogether too small for him. The patient lost nineteen pounds in weight, and this, although, as I wish particularly to emphasize, he was not put on short commons. Although this case was attended by really remarkable success within a few days, I do not mean to assert that all similar affections can be cured in the same short space of time. I have already said in my work on phthisis, "Patient, be on your guard against any man who

promises to do wonders, whether he be privileged to practise or not"—and I now say the same; every disease must take its time, one man gets cured more quickly than another. But the plant of health blossoms sooner or later for everybody nevertheless.

CURE OF AN ABSCESS IN THE HEAD.

By H. Sperling, Natural Healer in Berlin.

Mr. *Maske* of Berlin, living at the time at 20 Friedrichsberger Strasse, had struck his head against the balustrade in the dark. Suffering as he had been for some time from congestion and headache, it was no wonder that these increased in consequence of this blow to such a degree as to be almost unendurable. He felt, at times, as if his head would burst, and, though the principal pain was only in one place, his whole head was affected by it. I found on examining his head that even with the very slightest pressure on the affected place Mr. *M.* became insensible. I told him that he had an abscess in the head, that a derivative treatment must be applied, that the head must be cooled very gently, etc., etc., unless it was already too late, as fainting and a paralytical condition of the whole body, very bad symptoms indeed, had supervened. In medical treatment, if the vital force is weak, and the healing process does not take place very speedily, death is generally the result, as either mortification sets in, or else the purulent matter acts with a disintegrating effect on the brain. At best, nature finds relief by discharging the matter through the ear or the nose. By administering violent medicines, however, the discharge is suppressed, and the morbid matter in the head, reinforced still more by these poisons, draws the brain and other adjacent vital organs within the sphere of its destructive action, and causes paralysis and other serious affections, death being the inevitable result. An abscess in the head may arise from congestion, which, for some reason, has existed for a considerable time, as both the smaller and larger blood vessels become distended through increased determination of blood to the head. This engorgement causes deposits of old, morbid, foreign substances which, unless they are, by the law of compensation, expelled and replaced, settle permanently, and, by attacking whole masses of tissue or single portions of it, exercise a pressure on the brain. Or, again, they cause inflammation and produce a fibrous exudation, and sometimes degenerate into festering suppuration and even mortification. With the local symptoms are associated those of fever, affections of the brain and the cerebral tissues, or pyæmia (blood poisoning). My treatment commenced with foot steam-baths, followed by foot-baths (82° to 86°), enemata, (73°) massage of the arms and legs; stimulating, foot, leg and calf-packs, and wet cool head-compresses, put

on turban-fashion, and changed as required. Not till a few days afterwards could I give partial baths, and a few days later full steam-baths, wet rubbing of the whole body, slapping, and other treatment, such as mild (95° to 91° to 86°) head affusions and wet packs, etc. This treatment resulted in the formation of an abscess behind the ear, which increased from day to day in size and in pain; the tension became so great as to induce me to subject the ear to steam, and after a few days a loud report announced the bursting of the tumor, and a discharge of matter ensued, which flowed for several days more or less copiously, and caused wonder as to whence such a quantity of purulent matter could have come. If the natural method of healing had been applied sooner, no abscess would have formed at all, because the healing process would have been supported by its beneficient action. The pains diminished in the ratio of the quantity of pus discharged, and the patient was now able to sleep a little, and appetite for food and drink returned, which was satisfied by a non-stimulating diet. The pains left him entirely by degrees, while the discharge from the ear still continued for some time, until that, too, ceased after from four to six weeks. I treated him further by applying to him (73°) tepid enemata once a day, abdominal and calf packs every other night, followed by steam-baths with full packs once a week, wet rubbing of the whole body every day, with head affusion, breathing exercises, massage, and the strictest non-stimulating diet.

All this was necessary, in order to enable the system, which had become accustomed to discharge its morbid matter through the head, to once more avail itself of the ordinary channels of excretion, the skin, lungs, kidneys, and intestines. Finally I had only a wet rubbing of the whole body given once a day, a few baths during the week, and the vegetarian diet continued for some time longer.

A complete cure rewarded the treatment.

Head, Affection of the (Chronic), see "Bad Health," also "Kneipp Cure."

Head Affusion, see Index.

Head Bath, see Index.

HEAD, COLD IN THE (Coryza). This well-known ailment may be acute or chronic.

Symptoms of the Acute.—**Swollen and red mucous membrane, connected with a feeling of dryness and obstruction in the nose, a constant desire to sneeze, difficulty in speaking and breathing, inflammatory state of the lacrymal glands, and finally a more or less copious secretion of watery mucus.**

By frequent use of the handkerchief, the upper lip and the nostrils are rubbed sore.

In addition to these local external symptoms, a cold in the head may be accompanied by general symptoms of no slight importance and of a more or less violent nature. These are, a feeling of heaviness in the head, headache, pains in the limbs, want of appetite, shivering, pale thin face. Later on, violent thirst sets in, the pulse is accelerated, up to a hundred a minute, the temperature of the body rises, so that at times the sufferer may have several degrees of fever.

When children, aged people, and those who suffer from affections of the breathing organs take cold, the matter should not be treated lightly.

Causes.—A cold has its origin in a chill, *i. e.*, the skin having become too cold to allow the pores to secrete properly (these latter contracting in the cold), the fluids, which should be secreted through the pores of the skin, are forced to seek an exit by the mucous membrane of the nose. A cold is, therefore, nothing more or less than an abnormal secretion (diarrhœa is practically the same thing, the morbid matter attacks the mucous membrane, and nature endeavors to eject it from the system by frequent and urgent calls to relieve the bowels).

Another Cause is infection, therefore it is advisable not to use a pocket-handkerchief that has been previously used by some one suffering from a cold, and all contact with them, such as kissing, should be avoided. The sufferer should also take a clean handkerchief as often as practicable.

General Causes.—Cold, wet weather in spring and winter, sudden changes in temperature, and getting cold or wet feet and hands, draughts (especially when the body is overheated), sleeping in overheated rooms, toothache, and polypus of the nose in its first stages, etc., may all be looked upon as the possible originators of cold in the head.

Treatment.—This must be selected with a view to bring about normal secretions, *i. e.*, that all the organs of the body secrete uniformly. Therefore, it is advisable to undergo a sweating cure without loss of time. This consists of a steam-bath in bed, followed by a wet rubbing of the whole body (70°), or steam-bath and full pack, followed by bath and douche. One or two applications usually suffice to effect a cure.

Water of 76° should be drawn up the nostrils, gargle with water of the same temperature, keep sitting-room and bedroom dry, and take plenty of fresh, sunny air.

Another Treatment consists of wet rubbing of the whole body (71°), after which the patient is well wrapped up in woolen blankets or rugs for about half an hour (see "Dry Pack"), in order to get him thoroughly warm, whereby secretion again becomes regular, and the cold or

diarrhœa disappears. Instead of this, a different sweating cure may be substituted. See Index.

As a rule, a non-stimulating diet, uniform warmth, and plenty of pure, mild air will of themselves effect a cure. In cases of high temperature and of fever, a full pack may be given, until gentle perspiration ensues. Then follow on with wet rubbing and thorough drying; perhaps a second pack may be given.

Siegert writes as follows in his book entitled "Application of Hydropathy." It is an error to suppose that in cases of cold, regular baths or rubbings should be discontinued, whereas it is of the greatest importance to attend to cutaneous action most carefully at such a time, in order to ensure a speedy secretion of any morbid matter that may be in the system and not to place the burden of discharging them on the organs of respiration. An abdominal pack at night, together with a shoulder-pack, wet rubbing of the whole body in the morning, gargling repeatedly with lukewarm water (71°), drawing up of warm water (76°) into the nostrils, in conjunction with moderate exercise and fresh but not too cold air, and a non-stimulating diet will soon cause cold and cough to disappear.

Chronic Cold in the Head is an obstinate form of cold in the head, which has become chronic, and which may or may not have been preceded by an acute cold.

SYMPTOMS.—Sometimes it is unattended by fever; consequently none of the direct inconveniences are felt which distinguish the acute form of cold air conjunction with fever.

GENERAL SYMPTOMS.—Stoppage of mucous secretion, in consequence of which swelling and dry inflammation of the mucous membrane extend to the forehead, throat, etc. At times violent headache and fever, increased secretion of a partly slimy, partly purulent mucus, the speech becomes nasal, breathing through the nose gets difficult, because the mucous membrane of the upper part of the nose swells considerably and aggravates the contraction caused by the passing of the thickened mucus. The veins are distended; people suffering from this ailment are compelled to breathe through the mouth and keep it open constantly.

The swelling of the mucous membrane of the nose is often attended by swelling of the tonsils, of the mucous membrane of the gullet, and of the drum of the ear, whereby arises increased difficulty in breathing and partial loss of hearing. The evil smell attending ozœna (which see), is entirely absent.

TREATMENT.—A daily steam-bath or steam-bath in bed as above, together with a stimulating trunk pack at night and, perhaps, also a shoulder

pack or abdominal and throat compress. In the morning, wet rubbing of the whole body, which may also be applied in cases of ordinary cold.

Foot steam-baths and foot steam-baths in bed are also beneficial, and drawing up of water into the nostrils, nose-baths and gargling should be frequently resorted to. Also gentle stroking from the bridge of the nose upwards over the forehead, and stroking the forehead and the temples with both hands, at the same time, to right and left downwards, and then passing on to massage of the throat, which may be applied with advantage both in acute and chronic cases of cold. For the rest take exercise in the open air. See Index and "Kneipp Cure" for cold. For Modes of Application see Index. See also "CATARRH" under "Kneipp Cure."

Head, Erysipelas in the, see "ERYSIPELAS."

Head, Gout in the, see "GOUT."

Head, Internal Tumor of the, see "HEAD, ABSCESS IN THE."

Head Louse, see "VERMIN."

Head, Massage of the, see Index.

Head of Different Races, Shape of, see "FEATURES."

Head Pack, see Index.

HEAD, SCURF ON THE, attended by loss of hair, is always an indication of faulty diathesis. By leading a regular and healthy life, washing the head every morning with tepid water, taking plenty of open-air exercise in summer, and keeping the head well covered on cold days after washing, the complaint will disappear in time. See also "CUTANEOUS ERUPTIONS."

Head Steam-Bath, see Index.

HEALTH, CARE OF. Though it may not be possible in the circumstances of our modern life to observe all the conditions necessary for health, I will ask you, dear reader, at any rate to begin with the most important of these.

The following simple directions can be carried out by every one (by attending to them many diseases will be avoided, and the health of everybody improved):

Once a week a lukewarm (86° to 89°) bath, or a wet rubbing of the whole body, or ablution (66° to 77°) should be taken. For those commencing this treatment the temperature of the above applications should be respectively 91° to 92° and 82°. I have observed in my own family that a bath has always been followed by a feeling of cheerfulness and well-being. A bath refreshes not only the body, but the mind just as well.

What is the ordinary opinion to-day on the subject of baths? One Saturday morning, when my wife had just dressed herself after her

weekly bath, the milk-woman came in; as soon as the latter noticed that my wife had been bathing, she said to her, "You look clean, but you are too old to bathe." That's just it! The lower classes in our country imagine that only babies and children ought to have baths.

2. The bedroom must be well ventilated during the day, the doors and windows being left open for some time, and the bed must be left uncovered, in order that proper exhalation may take place. One window at least must be left open at night, if even for only a short space of time in the case of a beginner.*)

3. Open-air exercise should be indulged in frequently; if possible, every day. Long and deep breaths should be taken (this constitutes a form of breathing gymnastics).

4. The rooms, used for living and working in, must be frequently ventilated, at any rate in the morning, by opening the windows and doors, and not only in summer, but also in winter. It is well known that a room filled with fresh, pure air can be more quickly warmed than a room in which the air is bad.

5. Observe moderation in eating and drinking. Spirits, strong coffee, beer or wine, spices, tobacco, meat, etc., should be avoided or indulged in sparingly.

6. Persons engaged in occupations employing only a limited number of bodily or mental faculties, and those leading sedentary lives, should provide themselves with work for their muscles, generally by the daily practice of gymnastic exercises. (See "CURATIVE GYMNASTICS.")

7. The bowels ought to act at least once a day; in case of need, an enema may be employed. Aperients are injurious. Those inclined to constipation are advised to practise kneading the stomach every day; this can be done in bed for five minutes in the morning. The legs should be somewhat drawn up during this process. Massage of the stomach is sometimes necessary in obstinate cases; the region operated upon should be slightly greased.

He who follows these rules, will protect himself against disease, reach an advanced age, and live a happy life.

Health, Laws of, see "HYGIENE."

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*) Every morning, immediately after breakfast, women seem to regard it as their duty to put the bedrooms straight. The beds are shaken, made and covered with heavy white counterpanes. This is decidedly prejudicial to health. The bedcovering should be pulled back, so that there may be plenty of room for the exhalations to take place. It is a still better practice to expose the bed to a draught during the day.

The following should be attended to: It is the custom in summer to put the beds in the sun to air them. By this practice the feathers get too dry and lose their elasticity. It is better to put out the beds when the air is dry and the sky clouded.

THE HEART. (Figs. 203, 204.)

The sound human heart, in its adult state, is a hollow and very strong muscle, about six inches long and from three and three-quarters to four inches wide in its widest part, furnished with many important nerves and blood vessels. It is situated in the cavity of the chest between the lungs, with its broad end turned upwards and backwards, and its point, or apex, turned downwards and forwards and slightly to the left side, opposite the interval between the fifth and sixth ribs. A white, transparent skin, which enfolds it as in a cloak and affords it a certain amount of support,

Front View of the Heart After Removal of the Pericardium.

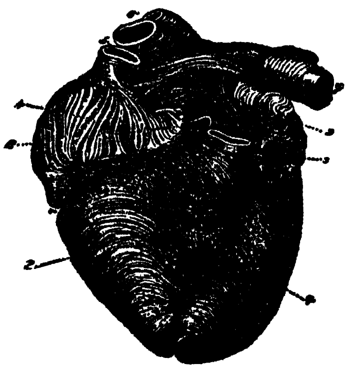


Fig. 203.

1) right auricle; 2) right ventricle; 3) left auricle; 4) left ventricle; 5) opening of the vena cava superior; 6 and 7) openings of the pulmonary veins; 8) opening of the pulmonary arteries; 9) opening of the aorta.

The Heart After Removal of the Front Wall of the Ventricle.

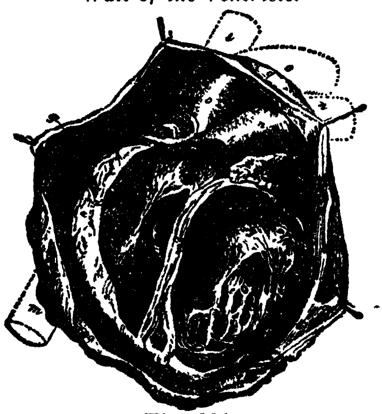


Fig. 204.

a) wall of right ventricle; *b*) wall of left ventricle; *c*) partition between the right and left ventricles; *d*) cavity of the right ventricle; *e*) cavity of the left ventricle; *f*) tricuspid valve; *g*) mitral valve; *h*) orifice of the pulmonary artery; *i*) orifice of the aorta, each with three semilunar valves; *k*) right auricle; *l*) vena cava superior; *m*) vena cava inferior; *n*) pulmonary artery; *o*) aorta; *p*) left auricle; *q*) pericardium.

is called the pericardium. The inner surface of this is kept moist with a serous fluid secreted by evaporation, which, however, is again partially absorbed, in order that accumulation may be avoided.

The cavity of the heart is divided into two equal parts by a partition extending from the top to the bottom. These two halves, the right and the left, are subdivided by two horizontal walls, so that each has an upper and a lower compartment. The blood can pass from the upper to the lower compartment, in each, through the horizontal walls, but not from one half to

the other, through the partition which separates them. The lower compartments are called ventricles; the upper ones, auricles, right and left respectively.

The chief function of the heart is to keep up the circulation of the blood, for which purpose it is condemned to perpetual motion. Upon the continuance of that motion life depends. The stoppage of the heart's action is tantamount to death, while irregularity in its movement means disease. The movement itself is dependent upon the blood which flows continually through the heart. The blood, after making the circuit of the body, discharges itself into the right auricle through two great trunks (the *superior* and *inferior vena cava*), passes thence into the right ventricle, and from this into the lungs through an artery which opens out of the upper part of the ventricle on the side, away from the partition. In the lungs it is oxygenated (supplied afresh with oxygen), and from them it passes back to the heart through four trunks (the pulmonary veins), which open into the left auricle. Hence it flows into the left ventricle, and from the left ventricle, through the great artery called the aorta, it is distributed anew into all parts of the body, except the lungs. The short course of the blood from the heart to the lungs and, through them, back to the left auricle is called the lesser, or pulmonary, circulation; whereas the course from the left ventricle through the body and back to the right auricle is called "the circulation of the blood."

The power, which supports the two circulatory systems, lies in the continued alternate contraction and dilatation of the heart, which, however, occur in succession in its parts, the auricles and ventricles. When the auricles contract, they drive the blood into the ventricles, the walls of which dilate to receive it; then they, in their turn, contract, the blood is forced into the aorta and pulmonary artery; the auricles, meanwhile, dilating and being filled from the veins above.

To prevent the return of the blood from the ventricles to the auricles, which might occur in consequence of the alternate contraction of those organs, nature has provided a wise arrangement in the form of valves between them. These open downward into the ventricles while the auricles contract; and close upward while the ventricles contract. A further provision against the return of the blood from the arteries to the ventricles consists in semi-lunar valves, affixed at the opening of the arteries, which open to receive the blood, and close against its flowing back.

In a healthy subject the action of the heart, consisting in and caused by the rhythmical contraction of the ventricles, is perfectly regular. It can be distinctly felt, and is called, beating of the heart. The number of pulsations varies with age and sex. They generally amount to from one hundred and forty to one hundred and fifty per minute in a new-born

DISEASES OF THE HEART, ORAL CAVITY AND LARYNX.

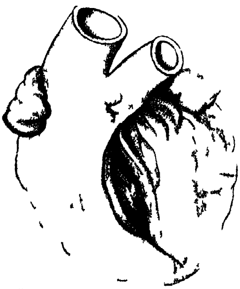
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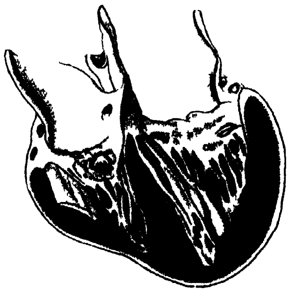
1. Normal Heart.



2. Pericarditis.



3. Fatty Degeneration of the Heart.



4 Inflammation near the Valves of the Heart



5. Dilatation of the Heart.



6. Gangrenous Diphtheria of the Tonsils.



7. Diphteria on the Larynx.



8. Tubercles on the Larynx.

infant, to one hundred and twenty at one year old, ninety to one hundred and ten between the second and third year, eighty-five to ninety from the third to the seventh year, in youth eighty, at the age of manhood seventy to seventy-five, and in old age from sixty-five to seventy. In the female sex the pulse is usually somewhat quicker and weaker than in males. From the number of pulsations the great rapidity of the circulation is apparent.

Calculations, based upon the number of pulsations and the capacity of the heart, have determined the fact that the whole of the blood passes through the heart in about one minute. See also "CIRCULATION" and "THE ORGANS OF THE CHEST AND ABDOMINAL CAVITY."

Pericarditis. This disease, which seldom occurs alone, is very often connected with articular rheumatism. Frequently, also, disorders of the organs in the cavity of the chest extend to the pericardium.

SYMPTOMS.—A feeling of burning and oppression in the region of the heart, great anxiety on the part of the patient, quick breathing, palpitation, pain in the chest, and later a weakened and dull pulse.

A noise like the crackling of parchment, or the grating sound of a saw, may be heard after the heart-beats. Pleurisy, with similar sounds in the breathing.

When a patient, suffering from articular rheumatism, or from inflammation of the lungs or their covering, complains of pain about the heart, palpitation, or shortness of breath, it may be assumed with very probable truth that he has an attack of pericarditis.

TREATMENT.—Abdominal and three-quarter packs, in turn with two or four-fold lukewarm (72°) compresses laid over the heart and covered with dry cotton or woolen material; to be left on for from half an hour to two hours, and combined with stimulating (68°) leg-packs lasting two hours. If the feet are cold, hot bottles, wrapped in wet cloths, should be applied to them, but removed as soon as the feet get warm. A foot steam-bath, of a few minutes' duration, might precede the use of the hot bottles.

If fever is present, a fever treatment should be adopted. For the rest, lying quietly on the back, fresh air, non-stimulating diet, and open bowels (ensured, if necessary, by enemata). Soft bedding and warm, high pillows should be avoided.

Instead of the above treatment, soothing whole or three-quarter packs may be applied, or a steam-bath in bed, with extra compresses over the heart. Outside the packs, soothing, or—if preferred by the patient—stimulating compresses may be laid over the region of the heart.

In chronic pericarditis, three or four stimulating whole or three-quarter packs, followed by whole rubbings. If the feet are cold, a short

foot steam-bath in bed should precede the packs. At night, stimulating foot or leg packs. The attendance in these cases must be characterized by the greatest care, as they are of a very serious kind; on this account, also, a strengthening treatment is recommended. The treatment, prescribed in the paragraph next above, may also be adopted in chronic cases. Under certain circumstances massage of the arms and legs, as in fever, is desirable. For Modes of Application, see Index. Kneipp cure, as in pleurisy.

Hydro-Pericardium arises out of a variety of other diseases—of the heart, lungs, kidneys, or liver—and consists in copious effusion of serum in the pericardium. This fluid, which may amount in quantity to several pounds' weight, is of a yellowish color, but is clear, and contains albumen and various salts among its constituents.

In these cases the difficulty of breathing is so great that the patient is often unable to lie, and is obliged to sit upright. A blue color and swollen condition of the face are symptoms of this form of heart affection.

TREATMENT.—The strictest observance of natural dietetics. Either a strengthening or a derivative treatment is to be pursued, according to the circumstances, the originating cause of the disease being taken into consideration. In other respects the treatment, laid down under the head of "PERICARDITIS" is also appropriate here.

Carditis, or Myocarditis, seldom occurs as a distinct affection, and is generally combined with articular rheumatism. Very often it is the consequence of medical treatment, and it may result in thickening and alteration of the valves of the heart (auriculo-ventricular valves). It is the source of most of the failures of the heart's action, and, therefore, imposes upon any one affected with it the necessity of resorting to a most careful mode of life.

SYMPTOMS.—As a rule, palpitation, quickened pulse, shortness of breath, and pain in the region of the heart will be noticed, although the last may be absent. But the indications of this disease will often be so slight that none but an experienced practitioner will recognize them. The other symptoms of pericarditis may also be present in this disease.

CAUSES.—Articular rheumatism, puerperal fever, typhoid fever, glanders, chills, apoplexy, a blow in the region of the heart, violent muscular exertion, etc.

TREATMENT (IN ACUTE CASES).—One or two stimulating three-quarter or whole packs daily; hot-water bottles, wrapped in wet cloths, applied to the feet if they are cold, or a steam-bath in bed. Extra compresses to be laid over the heart in any case, and the packs to be followed by washing the whole body. In violent attacks, soothing (72° to 82°) compresses over the heart, in combination with stimulating leg or calf

packs; rest, fresh air, non-stimulating diet, open bowels (see "ENEMATA"), sleeping with an open window. For Modes of Application, see Index. See also "INFLAMMATION." In chronic cases, derivative or strengthening treatment. Kneipp cure, as in pleurisy.

PERICARDITIS, A BAD CASE, CURED.

By H. SPERLING, Natural Healer, Berlin. (From the organ, "The People's Physician." for natural methods of treatment and hygiene.)

Mrs. *Kirstein*, Neanderstrasse 7, Berlin, fell very seriously ill in February, 1884. The doctor, who was called in, diagnosed inflammation of the heart, liver, kidneys, and spinal cord; and endeavored to allay it by a diet, in which cognac, meat-broth, minced meat, and similar aliments were included. Consequently, the inflammation increased to the highest degree. After the patient had been so treated for six weeks, and her strength had been almost consumed, her condition became very alarming to those about her, and she was given up by the doctor and by her friends. At this crisis it was decided—on the advice of a lady friend, and only by the wish to please her—to try the natural method of cure. I was, therefore, summoned, notwithstanding the disbelief maintained by the family in the method, in spite of various proofs of its efficacy, which were before them. I must confess that, on seeing the patient, I also nearly despaired of success. I found her lying in a state of delirious excitement which was painful to those around her, rolling her eyes, and ejaculating inarticulate sounds. The pulse was so quick as hardly to be counted, and the whole body even to the extremities was in a glowing heat, which gave place now and then to cold shivering fits (rigors). When consciousness returned, I ascertained that the right arm was disabled and very painful. The patient breathed with great difficulty, the throat was swollen and painful, the abdomen very sensitive. Further examination made it clear to me that the right hip-joint and a portion of the spine were inflamed, which had probably led the doctor to suppose that the spinal cord, pleura, and liver were the parts so affected. I was satisfied that the diseased condition was rheumatic.

It stands to reason that such diseased conditions had not formed and shown themselves in a night, or even a week, but that they were the outcome of accumulations in the body of morbid matter inimical to the organism, consequent upon a wrong manner of life during several years.

As the patient could not at first be bathed, owing to the extreme excitement of the organs, and particularly of the heart, and to the great pain and weakness, from which she was suffering, the first applications were restricted to light, partial washings; but, before all things, to cooling

and derivative measures, carried out in the most careful manner and in a very moderate degree. On the third day, as the inflammation and swelling in the throat had been somewhat reduced, the patient was able to swallow water. The head was more quiet, the pains generally were giving way, and it became possible to think of stimulating packs. These did the patient a great deal of good, and afforded her much relief, so that the arms and legs could now be massaged, and derivative measures continued. Still more considerable and rapid results were obtained when, the danger of a shock to the heart having been removed, it became possible to bathe the patient —at first carefully, but afterwards more confidently—with water of from 80° to 86°. After each bath came dry rubbing, and then massage. The stimulating packs, which served to clear the system of morbid matter, were now left on for a longer time; enemata (of 72°) were given at first two or three times, afterwards once a day; the diet was strictly of a non-stimulating kind.

The system so gained strength more and more; the organs began to resume their normal functions, and the healing process was thus accelerated. Even the disabled arm became stronger and more flexible; particularly when partial steam-baths, slapping and other forms of massage, and stimulating packs could be applied to it.

At the end of a week the patient was out of danger, and the doctor —whom I had requested to continue his visits as long as the danger lasted, but whose prescriptions had not been followed, because mine were preferred—declared, "I and her relatives had actually given her up, but I am, indeed, delighted to see that you have overcome the danger, and, if you will now carry out what I prescribed, the recovery cannot fail to be complete." The patient afterwards acknowledged to the doctor that it was not his treatment, but mine, which saved her. The cure was continued, with gradual diminution in the number and frequency of the remedies, until, after about three weeks, I was able to pronounce Frau *K.* convalescent. See also cases under "Bath Cures."

Cardiac Dilatation, or Cardiac Hypertrophy. These diseases have many symptoms in common. In dilatation, the cavity of the heart becomes larger, and the walls thinner; in hypertrophy, on the other hand, the walls become thicker, stronger, more bulky—as a consequence of the increased efforts of the heart (which has been described above as a muscle) to hinder an abnormal back-flow of the blood, or to get rid of the blood kept back in the heart, and so to establish its normal circulation. Any other muscle will become stronger, thicker, and larger, if it has to make extraordinary exertion.

Dilatation of the heart occurs as a result of the ventricle not closing sufficiently, and, therefore, not entirely emptying itself of the blood which, in dilating, it has received from the auricle, as under normal conditions should happen. The incomplete emptying of the ventricle may be due to any of several causes; either the heart (muscle) itself is weak, or the orifices of the arteries are contracted, or the valves of the heart do not close completely. In the first of these causes the walls stretch; in the second, the whole of the blood is not driven out; and in the third, it flows back from the arteries, and so the disease, dilatation of the heart, is caused.

Dilatation may result temporarily from pericarditis, and become chronic from degeneration of the muscular fibre, or from disease of the valves of the heart.

Symptoms.—The beating of the heart is much stronger than under normal conditions, and the pulse is quickened at the slightest exertion. Want of breath, oppression, occasional pain; if the region of the heart be tapped with the finger, an abnormal muffling of the sound will be observable; beating of the heart violent, but more so in hypertrophy than in dilatation. In the latter, an alarmingly strong sound will be audible in the pulmonary artery, consequent upon the force with which it is filled. The expert can determine hypertrophy by percussion.

Treatment.—Rest and moderate exercise, by turns; non-stimulating or mixed diet, just as the patient finds suitable; living much in the open air; sleeping with a window open; keeping the skin in a good condition by washing and rubbing of the whole body, or lukewarm baths of from 86° to 90° at first, but gradually less warm, so as to strengthen the system. At night, stimulating foot and leg packs, together with soothing abdominal packs. In the morning, vigorous washing, especially of the legs. The bowels should be moved daily by a copious enema of water of 81°, and small cool enemata of from 59° to 66° may be given often for derivative purposes. (In cases of obstruction, see "Enemata" and "Constipation.") In general, a strengthening treatment; and in the case of patients with a sufficient reserve of strength, a regenerative or preliminary treatment may be adopted. For Modes of Application, see Index. See also "Heart Disease."

The Kneipp Cure.—Upper affusion, thigh affusion, half bath, each twice a week; full affusion, once a week. Regular exercise; moderate consumption of fluids.

Heart Disease, or Cardiac Valvular Disease, may be inborn or contracted; in the latter case, particularly, as a consequence of rheumatic complaints or of medical treatment for carditis and pericarditis. See below. The inexperienced cannot discover the disease.

In order that the circulation of the blood through the heart may proceed in the proper order and direction, the openings (valves) between the auricles and ventricles (the tricuspid and mitral valves respectively), as well as the orifices of the aorta and pulmonary arteries, must be of the natural size; they must also admit of being closed by their respective valves sufficiently to prevent the back-flow (regurgitation) of the blood (from a ventricle to an auricle, or from an artery back into the ventricle). Unhappily, it not unfrequently occurs, either that these openings are unnaturally contracted, or that the valves are incapable of fully closing their openings. Such conditions of failure in the normal action of the heart are known as heart disease, or cardiac valvular disease.

They represent irregularities in the apparatus of circulation, which develop themselves as a consequence of unhealthy, abnormal alterations of the valves of the heart. These alterations may consist, as has been remarked, in the contraction of the openings, or in their not closing themselves.

Persons with inherited heart disease have generally a bluish appearance; that is to say, the face, lips, fingers, and toes are tinged with blue. They generally die early; but some, who can take care of themselves and are not obliged to do hard work, attain to a comparatively great age.

Heart disease, which is contracted late in life, generally arises from previous rheumatic ailments (rheumatic fever). It may also occur in consequence of over-exertion, or excessive use of alcoholic drinks; as also from medical treatment of carditis or pericarditis, and of other diseases.

Heart disease is seldom noticed in its early stages; it is only when serious symptoms show themselves that patients begin to think that they may be due to heart disease. Those symptoms are, palpitation, want of breath at the least exertion, swelling of the feet—at first occurring only in the evenings, afterwards chronic stage—scanty urine, dropsy, resulting in death.

TREATMENT.—Heart disease is for the physician one of the most thankless of human ailments, as there is no complete cure for it, when once it has established and declared itself. Nevertheless, by observing the following rules of self-treatment, the patient may hope for a comparative improvement in his general health, so that he may lead an endurable existence and even, under favorable conditions, reach a good age.

First, the patient must lead a thoroughly steady life, avoiding alcoholic drinks entirely, and taking all fluids in moderation, and food of a non-stimulating kind. All over-exertion, bodily and mental, must be avoided. Moderate exercise, however, is not only permissible, but necessary, in order that at least the muscles of the heart may be strengthened

and so rendered more capable of performing their functions. Particularly is the systematic and careful practice of walking up-hill (the terrain cure) to be recommended, as having produced very favorable results. A daily practice of one of the groups of curative gymnastics—which may be taken in their order—is also recommended.

Among water applications, only the mildest are suitable for persons suffering from heart disease; a whole washing of 77°; a bath, 88° to 90°, lasting from three to five minutes; and a foot bath in two stages, the first 100° and the second 66°—may each be taken twice a week. In case of palpitation, cold or cool compresses over the heart. With all the varieties of steam applications heart patients must be very careful; and they should not resort to them unless by the advice and under the supervision of a professional man.

THE KNEIPP-CURE—prescribes none but mild applications: washing on rising in the morning; walking with bare feet; two knee affusions, and two half-baths, weekly. See also "HEART COMPLAINTS" in "KNEIPP CURE."

CURATIVE GYMNASTICS.—All the twelve groups in succession, or in other convenient order, are recommended; provided that they are practised carefully, and that not more than one group a day is attempted at first. As the body becomes more capable of the necessary exertion, two or three groups may be gone through daily. For Modes of Application, see Index as well as for further particulars under "KNEIPP CURE" and "CURATIVE GYMNASTICS."

HEART COMPLAINTS CURED.

(From Dr. KLES' book, "Dietetic Cures.")

Mrs. *v. P.*, a widow, aged 54, had endured much anxiety and passed through great trouble. In the last ten years a very serious heart complaint had developed itself, which threatened her life. Irregular pulse, want of breath, bluish color of the lips, and swelling in both feet, were the most prominent symptoms of the disease. The lady underwent, with great care and endurance, a very long course of treatment (modified regenerative), experienced several critical attacks in connection with the passing of calculi, and was so happily cured that, as a proof of her recovery, she made the steep ascent of the Bastei from Rathen, in Saxon Switzerland, in an hour and a half, on foot and without being in the least degree exhausted.

This patient was at the outset very disconsolate and desponding, as her ailment had been pronounced organic heart-disease, or organic failure of the heart's action. That terrible expression, organic failure—

I do not know who may have employed it in connection with this case—has an alarming influence on sufferers from heart disease, and is at times very emphatically used by doctors in order to make a show of very deep learning, whereas it has, in fact, no scientific meaning at all. Every patient, however, on hearing it, at once imagines that he is incurable and must shortly die; and I can prove that, solely by the use of this and similar worthless expressions, many cases of deep depression and hypochondria have been caused.

People should be more careful how they declare an illness to be incurable. There are an infinite number of cases, in which patients who have been given up, or pronounced incurable, are enjoying permanent and blooming health; and it is not to be wondered at if such persons despise their former learned diagnostic authorities, and ridicule them as "incurable" blockheads.

VALVULAR HEART DISEASE, WITH EXTRAORDINARILY VIOLENT PALPITATION, BLUE APPEARANCE, ENLARGEMENT OF THE LIVER, SWELLING OF THE FEET AND LEGS, WANT OF BREATH, AMENORRHOEA.

Miss *R. K.*, aged twenty-nine, from the neighborhood of Dresden, suffered with all these symptoms, which, taken together, presented such an aggregate of disease that one could not withhold from the patient the greatest sympathy. The monthly period had not recurred for a year and a half, and the slightest movement produced a sense of suffocation. Given up as incurable in other professional spheres, Miss *K.* obtained admission to the Dietetic Institute. At the end of a fortnight the violence of the palpitations was considerably diminished, and the swelling of the feet had disappeared. After another fortnight the enlarged liver had become much smaller, the breathing had improved with the increasing quietness of the heart's action, and the patient was able to take short walks. The curative symptoms consisted, in contrast with other cases, in the frequent excretion of an extraordinary quantity of thin urine. In the fifth week the period returned, under conditions more and more marked, after a cessation lasting eighteen months. It will be easily understood that with these symptoms a basis of cure was obtained, on which it was possible to build up the further stages of a complete recovery.

Mr. *A. T.*, thirty-six years of age, a strong man and a busy farmer, suffered from violent paroxysmal palpitations, quickened heart action, want of breath in going up stairs or up hill,

starting out of his sleep followed by continued palpitation of the heart. His appetite and digestion were good. Before his admission to the Dietetic Institute he had been medically treated for more than a year with digitalis (fox glove), bitter almond water containing prussic acid, Ems lozenges, Karlsbad waters, iodine, bromine, quinine, injections of morphia, etc. After a conscientious observance of the dietetic rules of treatment for two weeks, the patient was delighted to find that the heart's action had become quite quiet. Among normal symptoms of cure, regular pains now made themselves felt in the loins, extending over several weeks, and culminating in the patient's being hardly able to walk. At last copious hemorrhoidal bleeding set in, which evidently stood in direct reciprocal relation to the heart symptoms, as with their access the heart completely recovered its normal condition and functions

Endocarditis. Internal carditis—or, inflammation of the serous membrane which lines the interior of the heart and which, by its reduplications, assists to form the valves.

Symptoms.—At first the beating of the heart is often stronger than normal, but, with the continuance of the inflammation, it becomes less and less apparent, until it is almost imperceptible. A bellows-like sound is audible over the apex of the heart, and palpitation, want of breath, etc., are further indications of this disease.

Treatment as for carditis, which see.

Palpitation of the Heart. By this is understood an increased action of the heart, which is often combined with want of breath. The causes of this complaint are very various; over-exertion, excitement—as a shock, passionate anger, etc.—or the result of heart diseases or disorders. Palpitation may also occur as one of the symptoms of nervous and other ailments. Other causes are, chlorosis, hysteria and hypochondria, excess of blood in the heart; immoderate use of coffee, tea, wine, spirits, strong beers, etc.

Treatment.—In acute cases, and in such as are due to excitement, shock, anxiety, alcohol, and so forth:

Derivative foot baths of 89° to 92°, followed by knee and calf affusions; repeated bathing (sponging) of the heart region. In the more severe cases, soothing compresses on the heart, and nape of the neck. Foot and calf packs, affusions on the back of the neck and body, and hip-baths will have a sedative effect. Living in fresh, pure air; cool, derivative enemata in case of intestinal obstruction or flatulence. If the feet are cold—and they must not be overlooked in the diagnosis—warm foot baths, steam compresses, etc., should be ordered.

The treatment in other cases must depend upon the causes of the palpitation, which will disappear with the originating complaint.

See also "Heart Diseases" under "Kneipp Cure."

PALPITATION AND OPPRESSION OF THE HEART CURED BY REGENERATIVE TREATMENT.

Mr. *K.*, from ——, writes:

"For more than ten years I suffered from articular rheumatism and gout, combined with severe palpitation and oppression. These attacks occurred several times every year, and with such violence that for weeks and months together I was unable to lie in bed. The spasms were extremely violent, and sometimes came in wrenching jerks so sharp that the body was involuntarily turned completely round. All medical remedies were tried—salicyl, digitalis, painting with iodine, and ultimately cupping and a course of peat and steel baths ordered by the doctor; but all were in vain. In my extremity, tormented with pain and fever, I turned to Herr *Ferd. Liskow*, head of the Natural Healing Establishment at Sommerstein. He promised to rid me of my trouble by means of the *Schroth* regenerative treatment. At the end of eleven weeks I left Sommerstein as one newly born, a healthy man. Fresh and vigorous, I was able to take long walks with the greatest ease. A year has now elapsed, and I find myself well and sound. I owe this entirely to the natural method of healing of Herr *Liskow*.

Cardialgia, or nervous pain around the heart.

This is a more or less violent pain, which comes in shocks. It proceeds (radiates) from the heart in various directions, particularly towards the left shoulder and back of the neck, or even to the left arm. Accompanying symptoms may be: increased velocity or partial interruption of the heart's action, difficulty of breathing and swallowing, faintness and insensibility.

The attacks may last only a few minutes or for hours. They often occur intermittently at quite short intervals, or the intervals may extend to weeks or months.

Causes—may be excitement of the passions or emotions, chills, over-exertion of the physical powers, or excess of any kind; or poisoning by alcohol or tobacco (nicotine). In general nervous weakness, or loss of nerve power; pain in the heart will not unfrequently be one of the symptoms.

Treatment.—Cool compresses over the heart, changed as soon as they get warm, and employed in combination with derivative treatment

—such as alternate hot and cold hand, foot, arm, and leg baths. Instead of these, stimulating arm and leg packs may be tried, with hot-water bottles laid on them. After the removal of the packs, vigorous cool rubbing must be applied to the respective parts. In general, fresh air, a strengthening treatment, and observance of the rules given under the respective causative diseases. It will often be sufficient for the patient to assume the recumbent position, with the upper part of the body somewhat raised, in order to get rid of the pain.

Atrophy of the Heart. This disease, which is very difficult of detection because all the characteristic symptoms of heart complaints are absent, often goes with great weakness, and dull pulse. The whole heart, or only a part of it, may be attacked, and the weight of it may be reduced by one half.

TREATMENT.—The strengthening treatment, as prescribed.

Cardiac Hypertrophy. See "CARDIAC DILATATION."

Fatty Degeneration of the Heart. In this disease the whole heart is covered with a layer of fat.

SYMPTOMS.—The beating of the heart will become by degrees less perceptible and the pulse slower. Shortness of breath, asthma, particularly in case of obesity, will be present.

CAUSES.—Valvular disease of the heart; or various other diseases, such as tuberculosis, typhus, chlorosis, etc. Excessive consumption of fluids, particularly of strong beers, an unnatural mode of life, eating a great quantity of meat or of preparations of eggs, or taking too much soup—in short, too liberal a use of fat-forming foods without sufficient bodily exercise.

TREATMENT.—First, the measures calculated to combat the cause of the evil; then, above all, a sparing and non-stimulating regimen—the food may be mixed if found suitable, but it should be dry—plenty of exercise in the open air, fresh air in the house, and sleeping with a window open. If necessary, a regenerative or preliminary treatment. For further directions, see the treatment prescribed under "OBESITY." See also "FATTY DEGENERATION OF THE HEART" under "Kneipp Cure." For Modes of Application, see Index.

HEARTBURN is the rising of a sour, corrosive or burning fluid, attended at times by vomiting. It may be caused by various ailments connected with disordered stomach caused by imperfect or irregular digestion, and by the food being retained in the stomach an inordinate length of time so that abnormal changes result, that is to say decomposition takes place.

TREATMENT.—Avoid the causes, and more especially avoid such food as is likely to produce an attack. Non-stimulating and easily digested diet should be adopted.

Moreover, cool rubbing of the region of the abdomen, an abdominal compress at night and the sipping of fresh water should be resorted to regularly. Seltzer and any other mineral water containing carbonic acid gas may be taken. Ventilate your rooms thoroughly, sleep with the window open, and take plenty of exercise in the open air. See also "HEARTBURN" in "Kneipp Cure." For Modes of Application, see Index.

Heart, Hypertrophy of the, see "HEART, DILATATION OF THE."

Heart Stroke, see "SUNSTROKE."

Heating Stoves, see "STOVES."

Hemeralopsia, see "NIGHTBLINDNESS."

Hemorrhoidal Complaints, see "PILES."

Closing up of the Jugalar Vein by Pressure of the Thumb in Severe Hemorrhage.



Fig. 205.

HEMORRHAGE, AND SUPPRESSION OF. By hemorrhage we mean the issuing forth of blood from the vessels or veins in consequence of injury to their walls. Hemorrhages from the capillaries or veins are usually staunched by the coagulation which gradually forms and closes up the opening. The more severer hemorrhages from the arteries on the other hand are more dangerous; these can generally only be stopped by pressing or tying up the vessels.

If the extravasated blood has a dark red color, and issues from the wound in an even and calm stream, it originates from a vein. These hemorrhages can be more easily stopped than those from an injured artery. In the latter case the blood is clear and of a scarlet color, and flows from the wound in regular beats. The nearer the injured artery is to the heart, the greater is the danger.

The hemorrhage can only be arrested by a continuous even pressure upon the injured branch or main stem. In case of hemorrhage from an artery on the head the pressure must be exerted below (Fig. 205), with hemorrhage from an artery in a limb, on the other hand, it is better to apply the pressure above the injured part; in other words, an effort should be made to press the artery against a bone. The pressure itself is best applied with the fingers, placing either the thumb crossways or the remaining fingers lengthways upon the artery and pressing evenly inward; when one hand gets tired, it shoud be changed for the other.

Tying up an Injured Brachial Artery.



Fig. 206.

Tying up an Injured Femoral Artery.



Fig. 207.

When the operator gets too fatigued, he should be relieved by a substitute or a ligature should be applied. For this purpose the half of a cork divided lengthways or an oblong pebble wrapped in a piece of linen should be taken and firmly fixed in its position by a cloth or bandage placed crossways over it. Or the limb may be tied up over the bleeding part (Figs. 206 and 207). Hemorrhage from capillaries are usually staunched of themselves, as already mentioned.

Hemorrhages can also generally be arrested by applying very cold compresses (not ice), or by holding the wound in cold water, especially when arising from injured veins or capillaries. According to the latest

researches hot water is even better for this purpose. Cases, however, occur in which hemorrhages in individuals possessing very thin blood, incapable of coagulation, can only be arrested with great difficulty, and instances have even been known in which surgeons have been obliged to stop the bleeding by pressure with the fingers, the hand or fist uninterruptedly during the whole day, or even several days, to prevent the patient from bleeding to death. The operators have, of course, to be relieved in such cases. We may here also mention that there is no better compress than the human finger, hand or fist, because it closes up most securely, fits best and absorbs no blood.

I may also remark, in connection with severe hemorrhages, that nature in these cases also does almost more than the best surgeon, for, if a considerable quantity of blood be lost, the patient generally falls to the ground unconscious, because the beating of the heart is weaker. What is the consequence? The remainder of the blood is chiefly concentrated in the more important organs, *e. g.*, the spinal cord, the patient being now in a horizontal position. In cases of severe hemorrhages it should, therefore, be the first duty of the healer not to place the patient on his feet, but to let him lie down, and it may even be a good thing to raise his hands and feet that the remaining blood may flow mainly in the important organs. Hot water and hot compresses may also be substituted for cold water for stopping hemorrhage. The hot water causes the fibrine in the blood to coagulate, and relaxes the arteries, whereby a kind of natural cork is formed which stops up the wound. In cases of severe hemorrhage from the vagina, arising from painful deliveries, Prof. *Zweifel*, of Leipzig, recommends syringing with hot water of 113°, and has obtained excellent results by this means.

HEMORRHAGE ARRESTED BY HOT WATER.

By Dr. Thiemann, of Bremen, Natural Healer.

For many years I have used hot water in the treatment of hemorrhages arising from the severing of arteries. A servant had fallen down in a cellar and had severed an artery with a bottle of petroleum. His comrades had applied numerous cold compresses without succeeding in stopping the bleeding. I happened to be passing and was called in. I at once dipped a towel in boiling water, wrung it out and wrapped it round the part. The bleeding was arrested in a few seconds. Three months ago I was summoned in a case of a rupture of the varicose veins. The woman had already lost a quantity of blood—cold compresses had no effect. I applied a hot compress, which at once stopped the bleeding. I have also tested the remedy on my own person in cases of slight cuts.

Physiological effect: relaxation of the vessel, checking of the circulation and formation of coagulated blood. Cold water causes an excessive contraction of thė vessel, in consequence of which the stream of blood presses too hard against it.

Hemorrhages from the Uterus, Continued or Morbid, see "WOMEN, DISEASES OF," or Index.

HEMORRHAGES, SUPPRESSED BY CHARM. A so-called sympathetic cure, practised by our ancestors, but no longer believed in the present day. Hemorrhages commonly cease of themselves in a short time, as the injured vessels contract and close and even entirely collapse, and are stopped up by a kind of plug, formed of the coagulation of sanguineous fibrine. Moreover, the extravasated blood, by congealing, forms a sort of cover over the opening of the injured vessels, through which the blood flows, thus preventing a further issue. See also under "HEMORRHAGE." The supposed effect of the "charm" can only be due to the pressure of the finger and to the firm determination to arrest the bleeding. Far too little account is taken, in the present day, of the influence of the human will, on which great stress is laid by magnetopathists in the treatment of diseases.

HEMORRHOIDS (Piles), Hemorrhoidal Vein. Hemorrhoids owe their existence essentially to a stagnation of the blood in the smallest, the small, and the larger vascular vessels of the abdominal or portal venous system. They may be congenital, but only to the extent that the causes, from which the disease originated in the father (such as station and calling, mode of living, diet, and occupation), may produce the same effect on the son. The male sex is more subject to it than the female. Luxurious mode of living, sitting much at the office-desk, riding on horseback or in carriage, contribute greatly to it. Though lighter forms of the disease appear at the youthful age of twenty or thereabout, fully developed and permanent cases occur between the ages of thirty and forty.

SYMPTOMS.—As precursors may be mentioned, abdominal swellings, indigestions, loss of appetite, constipation, and many other gastric and intestinal symptoms. Add to these, depression, determination of the blood to the head, and restless sleep. When the disease is more developed, the sacral region is in a congested condition, with irritation, prickling at the anus, and swelling of some of the veins (hemorrhoidal vein). With women there is, at the same time, swelling of the crural veins and those of the nymphæ. The enlarged rectal veins often cause most acute pains which are felt in any position, whether sitting or walking, and especially during stool, leading sometimes to inflammation of the rectal mucous membrane, which suppurates, and either discharges more or less blood and mucus

(then called internal piles), or they appear as external piles for a shorter or longer period, and disappear gradually, or make room for others. If these veins secrete mucus in consequence of some irritation of the mucous membrane for a length of time and in appreciable quantity, they are called mucous piles. The inflammatory irritation in the rectum sometimes extends to the sexual parts, and is productive of sexual desire in men, and of bearing pains along the uterine ligaments in women. The original hemorrhoidal complaint, pure and simple, sometimes changes into congested and inflammatory conditions of the bladder and the kidneys, and of the uterus, spine, brain, lungs, etc.; or these inflammatory and irritant conditions produce degeneration of the blood in the intestines, manifesting themselves by herpetic eruptions, or even gout.

Causes.—Congenital predisposition, too luxurious, rich, stimulating, indigestible diet laying a foundation for constipation. Stagnation of blood in the rectum, result of various diseases, weakening and passive hyperæmia in the abdomen, excesses of all kinds, continually disturbed mind, sedentary mode of life, and where the abdomen is pressed forward (*e. g.*, in men of letters, shoemakers, etc.), violent shocks, tight lacing, abdominal ulcers, pregnancy, etc. Diseases of the liver, sleeping with too many bed-clothes, etc.

Treatment.—Non-stimulating diet, especially whole-meal bread and fruit for the purpose of bringing about regular bowels, abundant exercise, more particularly plenty of hill-climbing, and stooping whilst gardening, unless prevented by determination of the blood to the head or chest. Quenching the thirst with pure water or the juice of some fruit, etc. Friction of the abdomen with the bare hands for some minutes, two or three times a day. With symptoms of pains in the back and abdomen, pains in the stomach and bladder, enlargement of the liver, etc., tepid (72°) abdominal compresses and calf packs are to be applied at night, and tepid (72°) wet rubbing of the whole body in the morning. A box steam-bath for five or ten minutes, followed immediately by a hip-bath (86°) for five minutes, affords great relief. Steam compresses and hot hip-baths are also to be recommended (82° to 86°) daily. If the feet are habitually cold, foot steam-baths about every other day, before going to bed at night, and steam-baths (or steam-baths in bed) if the patient feels cold. For constipation and as a detergent as well as for absorption, lukewarm enemata are to be given. See *ibid.* In case of persistent constipation, see "Constipation." For protruding piles, lukewarm (81° to 86°) hip-baths, once or twice a day (duration, eight to ten minutes), are to be applied. For the rest, a regular mode of life and above all, as before mentioned, plenty of exercise in the open air, and sleeping with the window open. In obstinate cases, strengthening and sometimes regenerative treatment. Sun-baths

to be applied under certain circumstances. See also "PILES" in "KNEIPP CURE."

CURATIVE GYMNASTICS—especially Groups V and VI. See "CURATIVE GYMNASTICS" in Index.

TREATMENT BY MASSAGE—as with strengthening treatment to follow a full steam-bath. If the patient is not strong, only gentle massage of the abdomen once a day. Above all, curative gymnastic exercises, Groups I and VI. For internal piles, see under "CIRCULAR MOTION WITH WAND." If a masseur or a masseuse is not available, the patient should himself massage the abdomen, at any rate, in the morning. See also "MASSAGE" and "CURATIVE GYMNASTICS" in the Index. For Modes of Application, see Index.

HEMORRHOIDS WITH PHARYNGEAL CATARRH.

Cured in the BILZ Sanatorium.

Mr. *E. K.*, commercial traveller of Kitzingen, 31 years of age, had to break his spring journey this year to undergo a course of treatment in the *Bilz* Sanatorium, for piles, chronic stomach complaint, and an acute pharyngeal catarrh. The patient was rather slim in build, and had suffered from jaundice a year and a half previously. On examination it was found that the portal vein was completely engorged, and that there was a large abscess on the left side.

An examination with the laryngoscope showed that the mucous membrane of the throat was deeply affected. The treatment consisted of half steam-baths, hip-baths, gargling, sun-baths, massage, and non-stimulating diet. After a month's stay at the sanatorium the patient was enabled to go back to his business, and expressed his gratitude for the attention shown him.

PILES COMBINED WITH PARALYSIS.—*J. Floyd* of Brooklyn, thirty-eight years old, had for many years suffered frightfully from constipation and piles. The skill of numerous physicians had been exhausted on him in vain, and finally he was sent by his friends to the Broadway Hospital, where he was under treatment for eight weeks, with the result that he grew continually worse. Hardly able to walk, even with the aid of crutches, he came to me. A dripping wrap in the morning, lukewarm hip-baths two or three times a day, frequent enemata, and a diet of unleavened bread, rye biscuits, apples, and potatoes so far restored him, that, after ten weeks, he was able to perform a moderate day's work.—Prof. *Trall.*

Hemorrhoidal Vein, see "PILES."

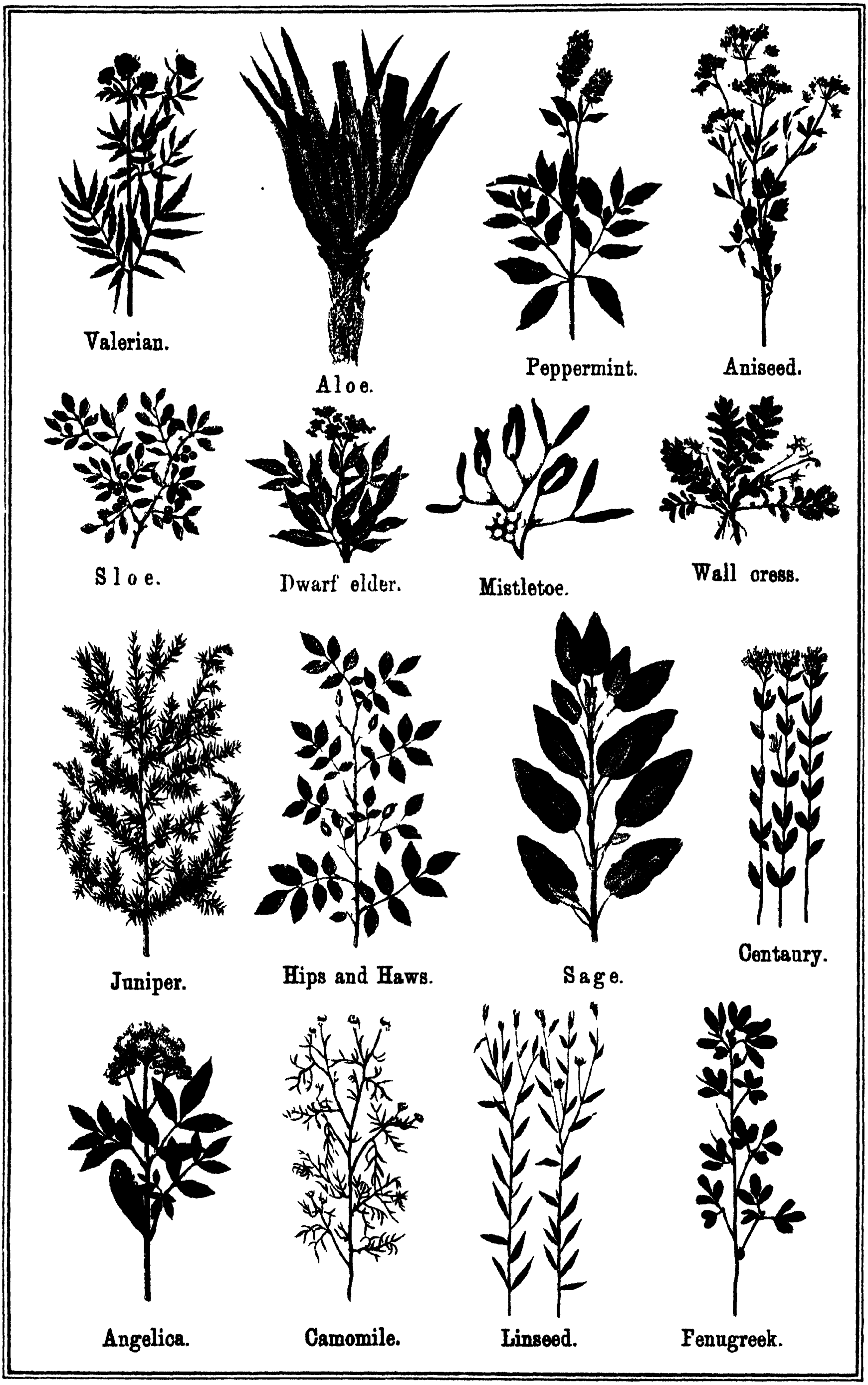
Hemostatics, see "HEMORRHAGE."

Herbs, Kneipp, see Index.

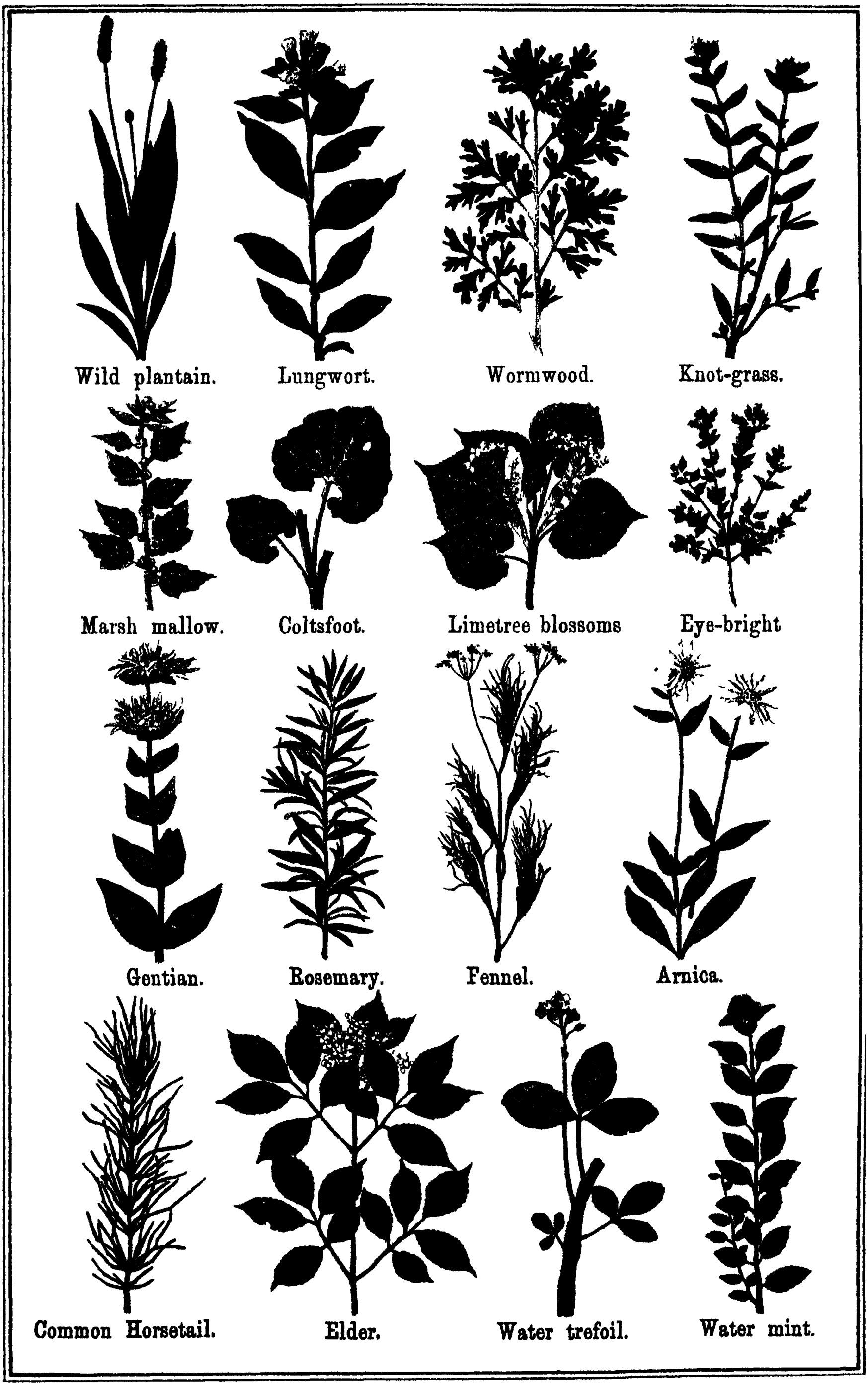
HERBS, MEDICINAL. At different times amongst gatherings of adherents and friends of the natural method of healing, I have heard the question discussed, whether the use of medicinal herbs and teas, which have for a long time formed the staple of "folk medicine," and in later times have once more become well known through Father *Kneipp*, is consistent with the fundamental principles of our system. Whilst some think that for conformity's sake no herbs or teas, even though innoxious, should be administered, because, through their means, the belief in medicine will be confirmed, and so people will again revert to the apothecary's stock; yet others are of the opinion that one might well make use of the powerful healing properties of certain plants and herbs, provided the latter produce no harmful after-effects of any kind. I cannot help thoroughly agreeing with this latter view. Why should not one make use of harmless plants and herbs? To those zealots who will not allow internal means to be of any value whatever, I put the question, whether they do not treat their patients by dietary prescriptions, and whether they do not give them salad and spinach, asparagus and celery, common and black radishes, onions and parsley. They surely know that these and many other plants are in daily use in our kitchens; that they have perfectly definite medical effects, and precisely for that reason play such an important part in our dietary measures. Therefore, if, in the following paragraphs, I shortly discuss the principal medicinal herbs, this will but be to increase the number of plants which, under the name of vegetables, have already been unconsciously used by us in a medicinal way. However, on that point, I wish to meet our newly won adherents half way. There is quite a large number of people who are, indeed, convinced of the benefits to be derived from the natural method, but in whom the belief in medicine is so firmly implanted that it is only unwillingly that they dispense with medicine bottles. These may thus be consoled by choosing one or the other of our herbal treasures. A favorable effect seldom fails to manifest itself, while, on the other hand, every harmful effect is absolutely excluded. We may now arrange the most important plants and herbs in alphabetical order.

Herbs, Medicinal.—Aloe. An excellent medicine for the stomach. One or two pinches of aloe-powder (to be bought at any chemist's) are boiled for five minutes with a half pint of water, and this decoction sipped in the course of the day. If rather more of the powder is taken, it acts as a laxative in the course of ten or twelve hours. The decoction of aloes is also used externally. Wounds heal rapidly when dressed with clean, white pieces of linen which have been dipped in aloe-water. It is also employed as an eye-wash for suppurating and watering eyes.

MEDICINAL HERBS.



MEDICINAL HERBS.



Herbs, Medicinal.—Anise-Seed. A decoction of the same in water is an excellent remedy for flatulence and distended stomach. Also in cases of colicky cramp it renders good service, relieving the severe pains in a few minutes. Instead of the decoction of anise-seed, one may give five or ten drops of anise-seed oil on sugar for the same malady. The oil can be obtained from any druggist.

Herbs, Medicinal.—Silver-Weed, in popular language also called "cramp-weed," is a very good remedy in all kinds of attacks of cramp. Even in cases of tetanus, this herb renders good service, wherever improvement is possible. In attacks of cramp of the head, stomach, and cramp in general, and especially in the case of menstruation colic with women, one can rely with certainty on the soothing effect of this little plant. It is best to boil (for five minutes) a cup of milk with a teaspoonful of the herb, three times a day. The patient should drink it as hot as possible.

Herbs, Medicinal.—Arnica, Mountain Arnica. A tincture prepared from this plant, was formerly the best-known remedy for wounds, as it works in a healing and purifying manner on old wounds, and such which are difficult to cure. When the new modes of disinfection, such as boracic and carbolic acid, sublimate, etc., came into use, faithful old arnica was forgotten, and only in the healing of animals did it manage to maintain its rights. If any plant deserves to be rescued from oblivion, and brought once more into general use, it is arnica. Tincture of arnica is very cheap and can be had of any druggist.

Herbs, Medicinal.—Dwarf Elder. The roots of this shrub are dried and powdered, and a tea prepared from the same, one teaspoonful being used for each cup. This tea works in a purifying and invigorating manner on the kidneys, and in case of dropsy so regulates them as to enable the urine to flow easily; however, one must not neglect to apply the treatment prescribed under "DROPSY" and "DISEASES OF THE KIDNEYS." The tea may, indeed, accelerate the process of recovery, but cannot complete it unaided.

Herbs, Medicinal.—Eyebright. The leaves of this plant are dried, pulverized and infused as tea. A piece of linen dipped in this infusion and put on the eyes at night, exercises a purifying and strengthening effect on the same. Especially in cases where the eyes have been weakened by over-exertion, such applications work in a vivifying manner, and increasing the power of resistance and endurance of the eyes. The tea can also be taken internally, and, on account of its bitterness, proves a good stomachic medicine.

Herbs, Medicinal.—Capon's Sail or Valerian. Of Valerian only the roots are used. These are either cut up into small pieces and prepared as tea, in the usual manner, or they are ground down to a fine powder. In such a state it is best taken with the food (soup, vegetables, etc.). From the root a tincture is also prepared and given on sugar in quantities varying from ten to fifteen drops, three times daily. Valerian is frequently effective against headache; it is principally used, however, for nervous and hysterical troubles of many kinds. It has a very soothing effect on emotional disturbances, without, however, dulling the intellect, like the allopathic bromide-preparations, which are often given in such cases.

Herbs, Medicinal.—Bog-bean. The leaves can either be chewed raw, or used in a dry state to make tea. Like all bitter herbs, the bog-bean exercises a favorable effect on the stomach, exciting it to a quickened formation of the digestive juices and thus promoting digestion. It produces a still better effect if a little wormwood or crushed juniper berries be added to it.

Herbs, Medicinal.—Fenugreek. This is one of the most important and efficacious herbal remedies. From the seed of it a powder is prepared and this can be used both externally and internally. When used internally as tea, it has a cooling influence in cases of fever. As a gargle in inflammation of the throat, this tea (cooled, of course) renders good service.

Fenugreek, however, does wonders, when applied externally for inflammatory processes which have commenced to suppurate or threaten to do so. In the Natural Method of Healing such maladies are treated with hot applications, steam-compresses, and local steam-baths, in order to accelerate the process of suppuration, and eject the morbid humors from the body. However, this end is attained far more speedily and surely by the use of fenugreek. For this purpose, the powder is boiled down to a thick paste and applied on a piece of linen, as hot as the patient can bear it, to the inflamed spot and changed as soon as it begins to cool. The effect is astonishing, and can only be compared to that of a powerful plaster; it does not, however, like the latter, inflame the skin, or produce blisters, but works slowly and surely by ejecting the impurities from the body. Its use is recommended in cases of ulcer and carbuncles, and with open leg sores, etc. The smell of the paste is indeed somewhat repulsive, yet with the excellence of its other attributes one should not mind such a trifling unpleasantness.

Herbs, Medicinal.—Blackthorn-Blossoms. Blackthorn-blossoms are an extraordinarily mild purgative. A small cupful of tea prepared

from them, and taken morning and evening for a short time, will restore the regular action of the bowels in constipation unless it is of very long standing. It can also be taken in conjunction with other stomach-strengthening herbs (wormwood, rosemary, juniper-berries), etc.

Herbs, Medicinal.—Bark of Oak. An affusion of chopped young oak-bark can also be used externally and internally. One or two small cupfuls taken daily stimulate the depressed function of the stomach, and awaken a fresh healthy appetite. Externally it serves for several purposes.

Application of it, *e. g.*, a piece of linen dipped in the infusion, causes swellings of many kinds to disappear; indeed, even goitre, if it has not too far developed, is frequently distributed by these means. Also for the washing of wounds, especially of old ones and those which heal slowly, the infusion of oak-bark is not to be despised. This infusion can also with advantage be added to baths, especially hip-baths. Wounds and boils on the anus or sexual parts, which are frequently present in sexual weaknesses, heal much more quickly than with the usual treatment by water-baths. Lastly, people suffering from piles can also make use of these baths with effect. The oak-bark, by means of the tannin it contains, contracts the blood-vessels, and in the same way relieves their distention at the anus. It must be further remarked that oak-bark requires to be boiled or scalded longer than ordinary herbs. To dissolve it properly at least half an hour is required.

Herbs, Medicinal.—Gentian. A plant frequently found in the Alps and at the foot of these mountains. Taken as a tea or tincture (twenty drops on sugar), it works as a stimulant on the stomach. It is also often very effective in nausea, attacks of giddiness and fainting, as these have their origin in disorders of the stomach.

Herbs, Medicinal.—Strawberries. The fruit of the strawberry plant is generally looked upon merely as a delicacy, and yet strawberries have valuable medicinal properties and are most efficacious in cases of gravel and liver affections. For these half a quart should be taken daily. Not only the fruit but also the leaves can be utilized and tea made of these, particularly when a little woodruff is added, forms a refreshing drink for the sick and healthy.

In cases of whooping-cough it has been observed that by the drinking of strawberry-tea the attacks are diminished in number, and the duration of the disease shortened. General treatment, of course, will not be lost sight of in such cases. Beware of the roots of the strawberry plant. They have an injurious effect.

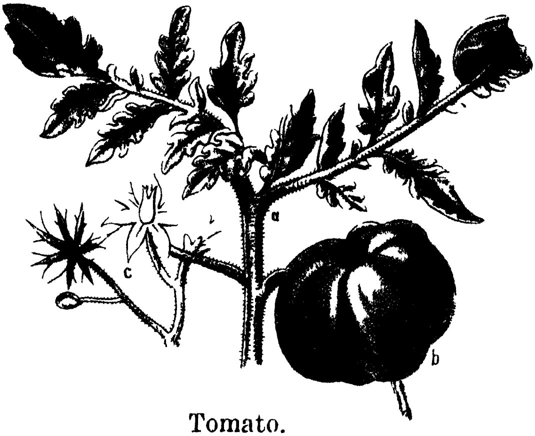
Herbs, Medicinal.—Fennel. Fennel seed, finely ground, and a teaspoonful of the same boiled in a cup of water or milk for five minutes, has the same effect as anise-seed on flatulence or overloaded stomach. Fennel infusion also gives great relief in attacks of colic, such as occur in summer and autumn, through indulgence in unripe fruit and new beer. Fennel applied to the eyes has a purifying and strengthening effect. It is advisable when taking a head steam-bath to add a spoonful of fennel powder to the water, because the steam can then be more easily borne by the eyes than when ordinary water is used.

Herbs, Medicinal.—Hips and Haws. These are the names given to the fruit of the dogrose. This fruit is a certain remedy for stone and kidney affections, and further against retention of the urine and catarrh of the bladder. The berries are best if gathered in November. They are first separated from the stones, dried in the shade, and kept in an airy place till required for use. From the fruits so dried a tea can be prepared, of which one or two cupfuls are taken daily. A tincture can also be prepared from hips and haws. The stoned fruit is added to an equal amount of purified spirit, whiskey or unadulterated brandy in a glass, which is well closed and allowed to stand for some days (with spirit from three to four, with whiskey from five to six days) when the liquid has attained a bright red or brick color, the tincture is ready for use. A few drops of the same are given two or three times daily in a spoonful of water. That hips and haws are also used in the kitchen for the preparation of sauces, etc., is probably well known.

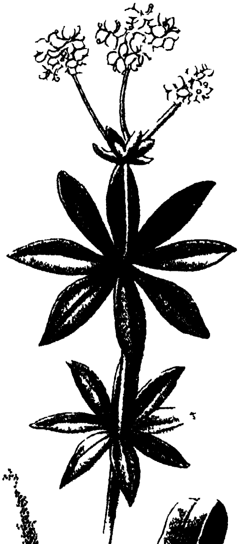
Herbs, Medicinal.—Bilberries or Blueberries. Bilberries have from time immemorial been known to be an excellent remedy for diarrhœa. Whether raw or boiled or dried for preserving, they render good service. Bilberry-tincture is made by filling a bottle half full of bilberries, and the rest with brandy. The bottle is allowed to stand in a sunny place for several weeks, if possible, and then the tincture will be ready for use. A teaspoonful is taken on a piece of sugar, or, in severe cases, especially in dysentery, a tablespoonful in a small glass of hot water. This dose may be repeated several times a day if necessary, and in conjunction with the treatment prescribed in the Natural Method of Healing, suppresses the disease in a short time.

Herbs, Medicinal.—Elderberry. The leaves, blossoms, fruit (the black berries) and roots of the elder have medicinal properties. From the leaves and blossoms a tea is made, which, if taken for a long time, acts as a blood-purifier. The same effect is produced by a mash prepared from the berries, which is best taken every morning on an empty stomach, a saucerful at a time. If the roots be chopped into small pieces, and a tea prepared from them, it promotes the flow of urine by stimulating

MEDICINAL AND EDIBLE PLANTS.



Tomato.



Wood-
ruff.



Quince



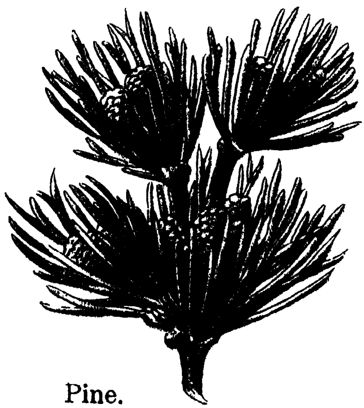
Bilberry or Blueberry



Calmus.



Elder or Lilac.



Pine.

MEDICINAL AND EDIBLE PLANTS.



Sorrel.



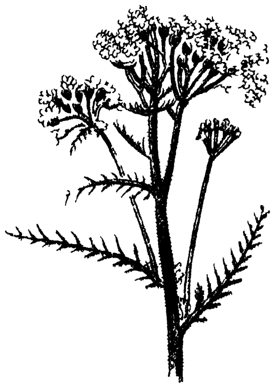
St. John's Wort.



Borage.



Black Alder.



Common Yarrow.



Medlar.



Tormentil.



Water-cress.



Cocoa.

the kidneys. In the first stages of dropsy, when the urine flows but sparingly, this tea frequently affords the desired relief, causing a copious discharge of urine, thereby relieving the swollen feet, hands or body.

Herbs, Medicinal.—Colt's Foot. The fresh leaves of Colt's foot laid on inflamed spots, draw away the heat and reduce the swelling, and wounds, when treated with these leaves, heal well and without suppuration. If it is desired to strengthen the effect, the juice of the leaf may be pressed into the wound, but the leaves and the hands must be well washed beforehand to prevent dirt getting into the wounds. A tea can be prepared from the dry leaves, which is good for a cough, as it loosens the phlegm. If the tea be made of equal parts of colt's foot, ribwort and lungwort, it acts still more powerfully.

Herbs, Medicinal.—Camomile. Camomile tea is an universal remedy for colics and consequent pains, especially of the abdominal organs. Gripes and pains in the bladder are removed, or at least alleviated, by one or two cups of really hot camomile tea.

Herbs, Medicinal.—Linseed. Linseed boiled down and used as a poultice acts like fenugreek but somewhat less strongly.

Herbs, Medicinal.—Lime Blossoms. Tea prepared from these blossoms is a popular means of inducing perspiration. Our ancestors, when they took chills, went to bed, drank a few cups of hot lime blossom tea, perspired all night, and got up well the next morning. Also in the applications of the natural method of healing, when it is desired to induce perspiration, *e. g.*, with packs and steam-baths, one may well give one or two cups of this tea in addition, especially with individuals who perspire with difficulty. The effect is immediate.

Herbs, Medicinal.—Lungwort. From lungwort alone, or mixed with equal parts of ribwort and colt's foot, a tea is prepared which quickly loosens and expels mucus in cases of cough and catarrh of the lungs.

Herbs, Medicinal.—Peppermint and Watermint. These are two kinds of mint, of which watermint is the stronger in action. They have a particularly favorable influence on the whole of the digestive apparatus. Especially with so-called weak stomachs, that cannot digest ordinary food, the effect of tea prepared from one of these mints is excellent. The stomach is strengthened and stimulated to a more rapid formation of the digestive juices. When headache accompanies wind in the stomach, the former being only a consequence of the latter, then mint tea can be used as a remedy and the headache vanishes immediately. Mint

boiled in milk, and drunk quite hot, is another remedy for gripes and pains in the abdomen.

Herbs, Medicinal.—Mistletoe. A tea made of this parasite, which grows on old oaks or apple trees will be found very effective in abnormal menstrual discharges. It may be prepared from mistletoe only or from a mixture of mistletoe and pewter grass, and a little cinnamon added, which will stop the loss of blood.

Herbs, Medicinal.—Rosemary. This herb is chiefly used as a remedy in disorders of the stomach. A cupful of rosemary tea will be found most effective in clearing a furred tongue, restoring the appetite, and curing a disordered stomach, especially if the latter be caused by indulgence in food or alcoholic beverages and manifests itself by nausea in the early morning. It is astonishing how rapidly rosemary acts in such cases.

Rosemary also acts the same as the powder prepared from dwarf elder, as it causes increased secretion of urine, especially in the early stages of dropsy. A wine made from rosemary is preferable in such cases. It is prepared as follows:—Put a handful of finely chopped rosemary in a bottle, fill up with hock and let it stand for a day, when it will be ready for use. A small wineglassful, taken three or four times a day, will soon have the desired effect.

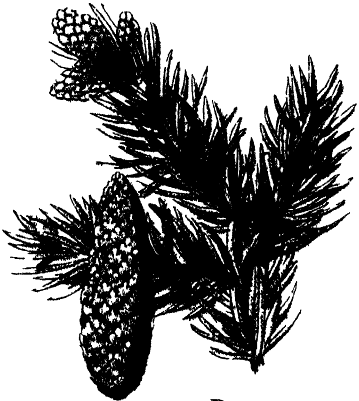
Herbs, Medicinal.—Sage. This is used both externally and internally, and in both cases has a purifying effect on the system. It is used in congestion of the throat, mouth, stomach; in the first case as a gargle, and for the latter one or two cups of the tea are taken. But externally also, it works as a purifier, especially in old wounds; the surface of the wounds is purified and the wounds themselves present a fresher appearance and heal more rapidly.

Herbs, Medicinal.—Ribwort. This tends to loosen mucus in lung-catarrh of old standing and is prepared as a tea, of which from two to three cups are sipped in the course of the day. Ribwort is taken alone or mixed with colt's foot and lungwort.

Herbs, Medicinal.—Centaury, Juniper, Wormwood. All three are excellent stomach remedies, and can be boiled and administered separately or mixed one with another. Juniper berries can also be chewed raw; ten or twelve berries are quite enough for one day. All these remedies serve to strengthen the stomach, free it from congestion, and to stimulate the glands of the stomach to more vigorous action, *i. e.*, to a livelier formation of the digestive juices.



Birch



Pine



March Trefoil



Charlock



Burnet



Iceland Moss



Blackberry.



Beech.

Herbs, Medicinal.—Plantain. This little plant has a good effect in stone complaints; indeed, I have often seen that sufferers from stone, who have drunk two or three cups of plantain a day for some time, have passed a quantity of stones of various sizes with their urine. I cannot assert that the effect is prompt in all cases, but a trial may be recommended.

Herbs, Medicinal.—Pewter Grass or Shave-Grass. This herb, with which every housewife ought to be acquainted, because it is used in cleaning pewter and zinc, is also an important medicinal herb, which should be found in every household. To make an infusion of shave-grass, boil two or three handfuls for from fifteen to twenty minutes in a quart of water, then strain through clean linen. This is an excellent wound-wash, which will heal even old wounds that have an impure surface. For recent wounds shave-grass is useful, too, especially on account of the rapidity with which it stops the flow of blood; even violent bleeding can be arrested by the application of linen soaked in the infusion. In severe bleeding of the nose, for instance, there is no simpler or surer way of remedy than by taking some of the infusion in the hollow of the hand and drawing it up through the nose. Taken internally as tea, shave-grass will purify the stomach. It is, therefore, advisable to always add some of this herb to the other stomach remedies (wormwood, centaury, sage, etc.), as the effect will thus be increased.

In urinal troubles of all kinds shave-grass is invaluable, whether they are caused by a chill, or resulting from gravel or stone, a few cups of shave-grass will remove them. In cases of stone I prescribe a mixture consisting of half shave-grass and half plantain.

Herb Soups, see Index.

HEREDITARY PREDISPOSITION. By this we mean a congenital liability to certain special complaints, *e. g.*, diseases of the lungs or nerves, disorders of assimilation (gout) etc. The constitution of the parents possesses certain weaknesses and morbid tendencies, acquired or inherited, and these tendencies are transmitted to the offspring. In many cases it may with truth be asserted that the sins of the fathers are visited upon the children. In such cases the child must be trained to lead a strictly healthy life, to breathe fresh air day and night, to pay strict attention to the condition of the skin and to observe a non-stimulating digestible diet. These are the indispensable conditions for strengthening the weakened constitution and rendering it capable of resistance to morbid influences.

Many diseases, such as syphilis, are actually inherited, the child being infected with the morbid matter before birth.

HERNIA, ABDOMINAL. The original cause of abdominal hernia is the relaxation of the abdominal wall and muscles, tissues, etc., which in consequence are not only liable to fatty degeneration and distention, whereby an inherited or contracted tendency to rupture may be promoted, and especially in those parts between the os pubis and the upper thigh where nature has left two fissures or openings, which are formed of elastic, tendonous muscular tissue, ligaments and sinews, which are collectively known under the name of Aporiurosis, the inguinal canal which is embedded between the tissues of the broad, *i. e.*, the internal slanting cross muscle of the abdomen, and also takes its course, for a short distance, between these, at the same time serving as a passage-way for the spermatic cords in the male and the round ligaments in the female. Furthermore must be mentioned the crural canal through which the femoral arteries pass. All these parts may become the seat of hernia, when a relaxed state exists in the respective internal (aponeurosis) and external (muscles) tissues, etc., in consequence of one's landing on the heels after a leap, a fall upon the seat, a violent fit of coughing or sneezing, a tight belt, tight-lacing, etc., whereby the entrails are pressed downward, and easily produce a rupture. On the other hand, in a normal condition the walls of the so-called passage touch each other closely, remaining, however, elastic and serving as a natural protection to the tissues, ligaments and spermatic cords, and thus prevent a rupture taking place by supporting and strengthening the inner and outer tissues. The only means of obviating a relaxation and closing the orifice of the hernial sacks in case of rupture having taken place, is by strengthening the tissues in question. This is done by massage of the abdomen and the region of the rupture and by appropriate curative gymnastics, especially by resistance exercises of the legs and trunk and for their support other Modes of Application of the Natural Method, whereby not only the whole of the abdominal walls, but also the whole of the intestines (bowels and the internal organs of the abdomen) are strengthened. This cure must be thorough, and not only in new and light cases, but also in old and obstinate ones. The patient must, until the tissues in question have become stronger, wear a well-fitting truss, that is, this truss must fit in such a manner (especially during gymnastics, etc.) that it will not form impediment to free movement. Therefore it is advisable that the patient should have a truss fitting closely, while the body is at ease, and one fitting loosely while performing the exercises. It is well to sound the place occasionally where the hernia is located with the fingers, so as to ascertain whether during violent movements the rupture shows a tendency to protrude or remains in the recess of the abdomen.

spread considerably, forming large yellow patches. These little scales look like bran, hence the German name Kleienflechte (Bran-rash). The cause of it is supposed to be a rank fungus growth, which arises and is fostered by uncleanliness, profuse perspiration, etc.

TREATMENT.—Soap well with soft soap and then take a warm bath for ten minutes (93°). Do this for several successive days. A steam-bath may be substituted for a change every third day.

Eczema, is the skin disease in which small pustules form about the size of a millet seed, or a little larger, which soon burst and discharge a watery fluid so that the whole part attacked discharges. The whole epidermis often peels in consequence and displays an evenly red, raw, wet and burning surface called salt-rheum (eczema rubrum) from its corrosive character.

It may spread over the whole body or be confined to certain parts; it appears especially on the hands and more particularly on the back of the hand. There are three varieties, according to its location.

Firstly. The above mentioned salt-rheum, which is generally found in the legs. The inflamed skin looks as if it were covered with a fluid glue. It feels sticky and has an evil smell.

Secondly. Milkscab, or Milkscald, which appears chiefly in infants during the period of suckling. See "MILKSCAB."

Thirdly. Elf-lock (tricorna), which appears on the hairy parts of the head in consequence of uncleanliness. See "ELF-LOCK."

TREATMENT.—Hayflower shirt twice a week for two hours at a time, followed by a two minutes' bath (90°), or washing the whole body (81°). Oat-straw bath (95°), twice a week, for ten minutes at a time, followed by a douche (81°). Bath (86° to 81°) for a minute or two, twice a week. Diet, vegetarian.

CURE OF A SEVERE CASE OF SKIN DISEASE.

Treated in the BILZ Sanatorium, Radebeul-Dresden.

Miss *B.*, of Hamburg, aged thirty-three, well built, had always been strong and healthy, but had suffered for two years from *impetigo*.

Every treatment, salve, ointment, and internal medicines prescribed by well-known medical experts had been tried, as well as sea bathing, but without success. Her mother had seen my book, "The New Method of Healing," in a bookseller's shop, and had procured a copy. Moved by its contents, she brought her daughter to our sanatorium with a view to make a trial of the Natural Method, though she placed but little confidence in its efficacy.

The patient was greatly run down and her spirits much depressed. The rash covered her hands and feet and the ichorous, cauterizing and burning secretions, more particularly between the toes, were so violent that she was only able to go very short distances, such as from the bath-room to her own room and without shoes. The burning sensations were especially violent at night, so that for a considerable period she had been hardly able to sleep at all, but had writhed in pain on her bed, without obtaining any rest the whole night. On the very first night which she spent in our sanatorium, she obtained a few hours of refreshing sleep, owing to the relief afforded to her irritable and sensitive condition by a mild bath, followed by full pack and short bath (91°), especial attention being paid to the parts affected by careful dabbing. The action of the skin was so imperfect that at first even a steam-bath followed by packing could not produce perspiration. Her condition even became worse, and the ichorous secretions spread further and further until at last the whole body was covered from head to foot. By its spreading the patient lost all hope, and, despairing of relief, had made up her mind to take her departure. It needed much persuasion on our part to induce her to abide by the treatment. We were firmly convinced that the spread of the secretion did not indicate a permanent change for the worse, but merely the efforts of the organism to throw off the morbid matter. The treatment was regularly proceeded with; the parts which were more particularly attacked than the others were kept constantly in soothing packs, as otherwise the patient could not endure the burning and irritation. After the (91°) bath, the body was gently douched with tepid water for half a minute in order to strengthen and invigorate the skin, and this had a most pleasant and soothing effect. The diet was strictly non-stimulating, mild and vegetarian, the windows of the patient's room were constantly open, especially at night. After a treatment of four weeks the secretion on the feet and legs subsided and healed up, and the patient was able to take fairly long walks in the grounds of the Sanatorium. Her condition became better from that time, her mental state improved, the secretions abated more and more, and after a treatment of eight weeks, which had been carried out with the utmost pains and consistency, she was absolutely cured of her grievous malady, and repossessed of her wonted gaiety. In proportion as mother and daughter and their relatives were at first antagonistic to our method, so have they become, by virtue of our success, devoted adherents, and have already sent us several patients out of the circle of their acquaintance.

CURE OF HERPETIC ERUPTION AND AFFECTION OF THE EYE.

By T. SCHNECKENBERG, Reitzenhain.

In the course of a twelvemonth, I have treated perhaps a hundred patients affected with herpetic eruption, and for the most part with surprising success. Only three of these have had and have still to exercise their whole faculty of patience, to completely recover; a boy whose nose and cheeks were covered with eruptions; a lady, who, by reason of the same serious disease, had to give up for eight years all intercourse with her friends; and, finally, a gentleman, aged twenty-eight years, who, from his second year had been troubled with an eruption, and whose upper lip and nostrils were swollen to an enormous size. All the patients had, of course, tried every imaginary remedy, but in vain. While the boy and the lady could, after a few months' treatment, be considered as having greatly improved, and were well on the road to recovery, the gentleman has now been completely cured for some months, and it is his case which I will now describe.

The owner of some wood-turning works, a Mr. *R.*, of P., had suffered from his second year,—for twenty-six years—from an herpetic eruption and affection of the eyes, and came to consult me professionally, by the advice of a gentleman from Chemnitz, who had been under my treatment. He had already spent considerable sums of money in doctoring. How the complaint originated, the parents could not tell; perhaps vaccination had done its work in this case as in many others. On examination I found the much swollen upper lip together with the nose covered with eczema; the mucous membrane of the nose highly inflamed by reason of the constant discharge of viscid mucus; the eye-lids also were nearly always closed in consequence. The condition was not always the same, but varied considerably in the space of a few days. As a boy he had often to be kept away from school, and to interrupt his studies. I discussed the plan of treatment with his mother, an extremely resolute woman, and as one of her relations had already died of a nasal cancer, she had every cause to favor a strict observance of my instructions. A correct diet was the first thing I prescribed, an interdict was put upon all spices (except salt), spirits and meat of every kind; fruit, farinaceous food, boiled in milk or water, *Graham's* and whole-meal bread, and a glass of water early in the morning, were substituted. For constant costiveness, two full enemata were ordered daily, followed by cool ones to be retained. Foot steam-baths, so common a resource of natural healers in my establishment, and so willingly taken, were given for cold feet. The first result was that the very violent

pressure on the forehead ceased. After ten days, I gave him an abdominal compress, to promote digestion, and bring about a better circulation of the blood in the abdomen. Some time later, when warmth in the feet had to a certain extent been restored, calf-packs and afterward leg-packs were applied for the purpose of increasing the circulation of the blood in the legs. Simultaneously with these, neck and throat compresses were given at night, especially for the affection of the eyes. For some time, I also ordered so-called "mouth-baths," but not to any great extent, having observed that if given for a long time, they weaken the system. This is very natural, as a quantity of alimentary substance is every time rinsed out with the mucus. As it is, the mouth is not an excretory organ. After four weeks there was a decided improvement in the patient's condition. He now had three-quarter packs, frequent after that full packs, followed by a partial bath to increase the cutaneous action of the whole body. While leg-packs, abdominal compresses, etc., were administered at night, I gave three-quarter and full packs of from two to two and a half hours' duration during the daytime, and, after three months, the eruption had entirely disappeared; his eyes were clear and bright, and now, after another four months, a very modest little mustache is making its appearance on the upper lip. The affection was not treated locally, simply because it was not a local affection.

CURE OF HERPETIC ERUPTION BY THE NATURAL METHOD OF HEALING.

By the patient himself, Mr. R. S., of Berlin.

This account is taken from the periodical, "The Natural Method of Healing."

Partly impelled by gratitude, and partly animated by the wish to show other sufferers the right road to recovery, I beg to relate the exact course of my illness, which was cured with the help of the Natural Method of Healing.

In May, last year, two pimples, each the size of a pea, made their appearance, one on the back, the other on my right arm. I scratched them both off during my sleep. As they would not heal, however, I applied some Hamburg plaster and thereby only caused the wounds, which were now suppurating, to grow larger. In the latter part of June, the wounds being nearly the size of a shilling, I was treated by an allopathist. Under his treatment, which consisted in almost daily cauterization of the wounds with nitrate of silver, they increased to a still greater size. (Linen with vaseline and antiseptic lint over it, were used as a dressing.) When I had borne this treatment for about ten days, the

doctor said that the wounds were healing, although still covered with a thick scab. When they were squeezed, no matter issued, it is true, but the scab never came off; after an interval of from eight to sixteen days there was a fresh accumulation of matter. The scab was forcibly removed, when it was seen that the wounds had once more increased in size. The affected places were "healed" about five times with the same remedy, always to open again; I paid this so-called doctor for about forty consultations. He called it "lupus vulgaris." I then consulted a specialist and professor at an university; he made the astonishing diagnosis "Syphilis or tuberculosis." His first remedy was mercurial ointment. I could only bear this for about two hours and then removed it. Convinced, as I was, that both his assumptions were utterly wrong, especially as there was no ground whatever for the former, I consulted a homœopathic doctor. Under his treatment, the wounds at any rate did not get larger, and were not nearly so painful. Having spent nine months in this way, and suffering excruciating pains, partly owing to the remedies (the wounds were in themselves painless, but had grown to a size of three or four inches in length and width), I entrusted myself to the treatment of Mr. *Canitz*, a Natural Healer. The result of his treatment was visible from day to day. The pains ceased and the wounds closed in ten days' time. Months have passed since, and I think I can say with confidence that the sores have been completely cured. I willingly allow public use to be made of my communication, and am ready to give my name and address, if requested. *R. S.*

Hip-bath with Rubbing, see Index.

Hip and Haw Soup, see Index.

HIP-JOINT, INFLAMMATION OF THE, is a disease of the sacral nerve-plexus or of the sciatic nerve alone. The latter, starting from the sacral plexus, runs along the back of the thigh, through the bend of the knee to the foot.

SYMPTOMS.—Tormenting pains (often cramp) in these parts; lumbago and pains on the outside of the thigh, or the outside of the leg in front, *i. e.*, below the knee, which, following the course of the great sciatic nerve, extends over the ankles into the foot. The most trifling cause is often sufficient to produce it, as a light touch, sitting down, bending the knee-joint, etc., and the pain may endure only for a few minutes, or for hours and even for days; and continuously, or with slight intermissions. It branches out to the thighs, knee-joint, feet, and toes, and is often so violent that the patient cannot walk.

CAUSES.—Colds, injuries, pressure on the nerves, due to tumors or distended veins; mechanical pressure upon the great sciatic nerve during

pregnancy, or accumulation of hard fæces in the rectum, congestion, typhoid fever, tuberculosis, etc.

TREATMENT.—A steam-bath in bed, or foot steam-bath in bed, every day (whichever is the most convenient of the two), continued until slight perspiration takes place; then a lukewarm (74° to 82°) wet rubbing or washing of the whole body, the sacral region and the hips being washed with warmer water than the other parts (86° to 90°) at first, but cooler by degrees, as the conditions improve. Massage of the sciatic nerve, beginning quite gently, and increasing very gradually in force. Such exercise or movement as the condition renders possible. Above all, the warmth of the body must be evenly maintained. If the pain is very violent, hot bandages, or, better still, hot hip-baths; followed by cool rubbing of the affected parts. The necessary measures for the removal of the cause of the disease must not be neglected. The electric light bath has proved to be one of the most powerful agents in this disease.

Non-stimulating, or, if preferred and found suitable, a mixed diet; fresh air, and daily movement of the bowels, to be secured if necessary by enemata. (See "ENEMATA" and "CONSTIPATION.") In obstinate cases, strengthening, degenerative, or preliminary (general) treatment is to be adopted.

ANOTHER TREATMENT.—If there should be inflammation, tepid (72°) linen bandages, two or four-fold, applied to the painful parts and well covered with woolen material, and left on one or two hours. Instead, or besides that, local steam hip-bath, half steam-bath, or steam-bath in bed, followed by wet rubbing of the whole body, may be taken. A daily (72°) wet rubbing of the whole body, perfect rest, and a horizontal position, are necessary besides. In other respects as above. (For different Modes of Application, see Index.)

TREATMENT, WITH MASSAGE, consists in rubbing, stroking, kneading, tapping and chopping of the painful parts, at first gently, but by degrees with greater force; the eighth group of curative gymnastics had better be applied before or after a wet pack. (See also "SCIATICA" under "KNEIPP CURE." For particulars on this subject, as well as on "CURATIVE GYMNASTICS" and "MASSAGE," see Index.)

Dr. *Werner* writes on massage as follows: "Sciatica is perhaps the best-known disease in which absolutely astonishing results are obtained by massage, even when the disease has existed for years."

If sciatica is brought on through a cold, and is of a rheumatic nature, vigorous stroking, combined with tapping along the course of the nerves is nearly always sufficient to cure the disease within a short time. There are frequently, however, morbid changes of the nerves, inflammations of adjoining parts, or exudations, pressing on them, which produce the

pains. If by external expedients, by the touch for instance, the seat or source of the pain can be exactly fixed, local massage will then be sufficient to effect the absorption of the matter which caused the inflammation, and so to remove the affection. Pelvic exudations are very frequently the cause of sciatica. If the pelvis can be reached, it can be treated with massage most successfully.

COCCITIS, OR VOLUNTARY LIMPING, CURED.

By Dr. Schulze, M. D., Natural Healer. (From the Journal "Natural Healer.")

A lady, aged thirty, a governess in an aristocratic family, came to me in October, 1885, and gave me the following medical account of herself. "At the end of April, of this year, when rising one day from the closet, I was suddenly attacked in the left hip-joint with a violent, cramp-like pain, which lasted for about ten minutes. I could neither walk, nor straighten the leg. I felt a painful quivering in it, and a cold perspiration broke out all over me.

When the cramp-like pain had abated, I could again straighten my leg and walk; but in walking I always felt a pain in the hip-joint, which remained stiff. I felt as if I had a wooden leg; and every time I sat down or got up the pains in the hip increased.

The family doctor, a professor and clinical lecturer at the university here, ascribed the pains to a cold, and said they would soon yield to good rubbing with *spiritus formicarum* (spirits distilled from ants) repeated every evening. But after fourteen days of this treatment I did not feel the slightest improvement. Then followed, for weeks, the most varied embrocations with iodine ointment, hot linseed oil, volatile liniment; all without result. I went in despair to the Clinical Institute in Ziegel-Strasse, where my complaint was also taken to be rheumatic, and my hip was rubbed energetically several times with some yellow ointment. This treatment, too, gave me no relief. I then followed the advice of a lady that I should consult her doctor who had cured her of violent rheumatism that for three months had kept her lying stiff in her bed. After a careful examination he declared my malady to be sciatica, adding that the cure would be tedious and that I need only be patient. The first time he prescribed for me a bottle of some light-colored medicine, of which I was to take a tablespoonful every two hours, and that I should rest my leg. The medicine soon took effect, but for the most part only in my head; for I always felt giddy whilst there was very little improvement in the condition of my leg (and that only, perhaps, because of my having rested it).

After I had taken several bottles of this medicine, the doctor thought it advisable to use electricity. But the first attempt did me harm, for during its application the same painful cramp-like pain and twiching came on that I experienced at first, so that for ten minutes I was unable to rise from the chair. He became impatient and made an injection of morphia, which, at first, certainly took away the acute pain, but made me so wretched afterwards that I had to contend all day with pains in my head and body. Having to go into the country with my pupil at this time, I hoped that living in fresh, healthy air would strengthen me and make me well; but in spite of that and of the good care and rest which I, to some extent enjoyed, there was no improvement in my hip-joint. As I could not adequately fulfil my duties, and as the family doctor pronounced my complaint incurable, I was compelled at Michaelmas to give up my situation. I then adopted the advice of a gentleman to try the natural method of healing."

On a close examination of the patient in a horizontal position, I found that the knee-pan of the affected leg was lower by several inches than that of the sound one; and on raising the whole leg and pushing the thigh briskly into the pan (the hollow in the pelvis in which the head of the hip-bone turns) I produced a rather violent pain. I then felt justified in the conclusion, in spite of the diagnoses of my colleagues, that the disease was neither rheumatism nor sciatica, but the re-awakening of chronic coccitis, which had shown itself in the patient's earliest youth, but had been suppressed. One characteristic symptom of that disease was, however, absent, namely, the fact that in coccitis the pain, at the commencement of the disease, is felt, not at the affected part, but at the knee. It is that pain in the knee which first attracts the attention of parents of children affected, for it is seldom that this disease occurs in adults, and leads them to suppose that the knee is the seat of the trouble.

Notwithstanding the absence of this characteristic symptom, the two above-mentioned and still more important facts were sufficient evidence for me, and the more so, as I considered that the symptoms pointed to a re-awakening of dormant disèase in an exceedingly scrofulous subject, I held that my diagnosis was correct; for those two facts showed that in consequence of inflammation of the periosteum and cartilage covering the head of the bone there had been a greatly increased flow of blood to those parts, as in all cases of inflammation, and the head of the bone had become enlarged, and was pressing beyond the pan, now too small to contain it comfortably; that the pain was produced by pressure of the distended blood vessels on the nerves connected with them, and that it was necessarily aggravated by my pushing the thigh

upwards, as I have described. I caused the patient to wear almost continually, but certainly at night, a thick wet compress, covered, of course, with a still larger dry one. At first I had the wet compresses changed frequently, in order to combat the existing acute inflammation, but later on caused the patient to wear them for hours, and all night, on the affected part, applying also full packs (lasting from one to two hours), followed by wet rubbing immediately after waking, for the purpose of stimulating the activity of the skin, and as a means of drawing morbid matter from the diseased spot. The leg was rested and saved as much as possible, and a vegetarian diet was observed. After this, certainly somewhat lengthy, treatment,—lasting about five months—the patient is completely cured of her complaint, for she neither feels any pain when rising or when walking; the leg has become much shorter, and only a rather dragging gait is noticeable, which, however, is said to have existed from her earliest childhood. She had, moreover, been suffering with eczema on the left shin-bone for years, and had used many remedies for it, till it had attained the size of a dessert plate. That, too, had disappeared entirely, and the whole aspect of the scrofulous patient has become much healthier and fresher, so that she has resumed her former post and fills it satisfactorily.

CURE OF SCIATICA.

(From the periodical "Organ for Hygiene and Natural Therapeutics.")

In September, last year, I fell suddenly ill. On awaking, one morning, I felt violent pains in the whole of my left leg, and extending from the hips to the toes, entirely preventing me from standing and walking. I applied at once to Mr. *Canitz*, a natural healer, who told me that I was suffering from sciatica. He ordered steam-baths in bed—that is, full packs with the addition of hot-water bottles, one at the soles of my feet and one to each hip, to be applied at first for two or three hours daily—leg packs reaching above the knees at night, non-stimulating diet, avoiding meat as much as possible; and spiced food, coffee, beer, etc., being forbidden. Enemata and wet rubbing daily.

After a fortnight I was so far recovered that I could, though with great pain, make attempts to walk. This caused me such great exertion, I limped so much, and got so tired after a few steps, that I should have preferred to remain lying still. But Mr. *Canitz* said I ought not to give up the attempt to walk, while carefully avoiding over-exertion, and in other respects I had better keep to my present mode of life and treatment.

After a few weeks I could venture upon short walks in the street, and Mr. *Canitz* then ordered steam-baths followed by full packs, at first

three times a week, afterward twice, telling me to continue the leg packs at night. In less than eight weeks I was completely cured by the natural method of healing and Mr. *Canitz's* care; a very short time, considering that the disease from which I was suffering often lasts a twelvemonth, and sometimes is never completely cured.

Of course, I conformed in every respect to Mr. *Canitz's* orders, and observed most strictly all his injunctions regarding diet. He had also given explicit directions in writing as to my treatment, to the bath-keeper of the Kopplin bathing establishment, and I must acknowledge this man's faithful execution of the orders.

After my recovery friends and acquaintances repeatedly told me that a complaint like mine disappears for a short time only to return again, and in consequence I lived for months in anxious fear of a relapse, and have waited to report until now. But, having waited so long, I think I may now safely indulge the hope that I am completely and permanently restored to health, and that I may bear witness to the splendid triumph which the natural method of healing has achieved in my case. Beyond question, this method rewards its faithful adherents and loyal followers of its teachers' advise, with the recovery of health in all ailments in which this is humanly possible.

I close this report with the expression of my gratitude for the great care and trouble which Mr. *Canitz* took of me in my trying illness; and with the hope that these lines may contribute to win more and more adherents and faithful members for the societies which promote popular hygiene, and the natural method of healing.

Berlin. *Aug. Goetsch.*

CASE OF SCIATICA CURED.

By Otto Wagner, Natural Healer, Manager of the Bilz Sanatorium at Dresden-Radebeul.

"Please come as quickly as possible to my husband (a basket maker in G.), who has been suffering for a week from his old enemy, rheumatism in the leg," said his wife to me, informing me at the same time that the pain was unusually severe, almost intolerable, and that the embrocations ordered by the doctor had done no good.

On arriving at the house I found the patient, a powerful-looking man of 40, in bed. *H.* gave me the following account of his case:

For five years he had suffered regularly every spring and winter from this complaint, which was steadily growing worse. The various doctors, whom he had consulted, declared the disease to be sciatica, a disease not easy to cure. All had prescribed embrocations, one had even

advised injections, but he had always been confined to his bed for six weeks before beginning slowly to recover. The burning and piercing pains seemed to start from the spine and pass down the outside of the left thigh to the knee. When he lay motionless he felt nothing, but the pain was scarcely tolerable when he made the smallest careless movement, when he raised or stretched his legs, and, especially, when he tried to go up-stairs.

I ordered a steam-bath in bed, followed by a lavation (77°) every day in the forenoon, a hip-bath (99°), lasting ten minutes, in the evening, succeeded by a thigh affusion of 68° (two canfuls), and wet stockings (68°) to be worn all night. On the following day the good effect of this procedure began to show itself; I showed his wife how to massage his legs, which process was to be carried out daily in addition to the other applications, and heard in a fortnight that the patient had entirely recovered from the disorder, and that he felt better than he had ever done before the treatment.

SCIATICA CURED.

By a Natural Healer.

Mrs. *St.*, the wife of a dealer in Z., was suddenly attacked by tearing, piercing pains in the right leg, shortly after having given birth to a child. These pains proceeded from the loins, over the thigh, through the knee-cap as far as the middle of the calf, making it impossible for her to contract the leg, to put her foot down firmly, or to climb stairs. The family doctor declared with a grave face, that it might be a long business, and prescribed embrocations and warm baths. This treatment had been continued for three weeks without the smallest benefit when I was called in. I prescribed the following course of treatment: Regular action of the bowels to be secured by the use of whole-meal bread and fruit, an enema of 86° (half a quart) to be given in case of need. A lavation of 73° every morning. In the afternoon, a three-quarter pack of 77° with a hot-water bottle to the feet and body, of an hour and a half's duration, followed by a lavation of 73°; daily massage of both legs, combined with gymnastics, and an abdominal compress of 77°, with calf-pack to be worn all night if possible. The patient daily improved in health under this treatment, and was completely restored after a three-weeks' course.

HOARSENESS varies in degree from mere roughness to the total loss of the voice. It occurs when the vocal chords are relaxed and lose their elasticity, or are crippled either by swelling or inflammation of the mucous covering of the vocal apparatus, or when they are themselves sore or overlaid with phlegm.

CAUSES.—Catarrh of the larynx, of the nose and nasal cavity, of the bronchial tubes, or of the lungs (the hoarseness of pulmonary consumption).

TREATMENT—depends on the cause. In acute hoarseness, gargling with lukewarm water (77° to 86°) and stimulating throat packs, together with frequent cool bathing of the throat externally. In addition to the throat packs, which must be continued and changed as they become oppressive, a daily steam-bath in bed, and extra compresses round the throat are recommended. Steam compresses round the throat, followed immediately on their removal by cool wet rubbing; massage of the larynx; spending as much time in the open air as possible; breathing pure air at all times; sleeping with the window open; a non-stimulating, digestible diet are further means of cure; but rest for the throat from speaking comes before them all. Singing and loud talking must be altogether avoided.

In chronic hoarseness, due to a deep-seated cause, frequent cool gargling, with water of 59° to 66°, and either stimulating or soothing throat packs, as the patient finds them agreeable, should be tried, in addition to such remedies as are adopted to the cause of hoarseness. Above all, a strengthening treatment should be applied, in combination with stimulating whole packs or steam-baths in bed, and extra compresses round the throat. Foot steam-baths and inhalation—and in some cases of this kind a regenerative treatment—are to be recommended.

In chronic hoarseness, which is, perhaps, the consequence of the vocal chords being crippled in some way, the third group of curative gymnastics should be tried (see Index for directions), in conjunction with massage of the throat, which is here an important factor in the treatment. (See also "HOARSENESS" in Kneipp Cure, and "MASSAGE," in the Index.)

HOARSENESS, CHRONIC, CURED.

(Communicated by W. S. in Fr.—from the "Journal of Hygiene and Natural Science.")

The Whitsuntide number of "Daheim," for the year 1880, published, in its columns devoted to hygienic subjects, the cry for help of the Reverend *St.* in D., who, by reason of chronic hoarseness, combined with great nervousness, had been for two years unable to fulfill his duties, and had, therefore, been compelled to employ a curate. This was a serious matter for him, as his own family was large, and he had been driven almost to despair by the failure of a variety of treatments which he had undergone.

The sender of the communication had applied to Pastor *St.* for particulars, and had received from him the following account of his case:

The voice becomes absolutely soundless after uttering a few words, and is unintelligible even to a person standing quite close; internally the throat is slightly red; there is no pain, but only a feeling of inconvenience from the roughness. On the other hand, the head is constantly so heavy, that intellectual work is out of the question; the feet are generally cold; sleep much disturbed; the bowels irregular; the mucous membrane of the nose so dry that for years there had been no occasion for the use of a pocket handkerchief.

The report as to the measures hitherto adopted ran as follows: "The disease showed itself in 1878 in a sharp attack of catarrh of the larynx, following upon a long period of nervous irritability. The family doctor ordered first rest, and then painting with lunar caustic. As my condition did not improve, he sent me to Ems, a watering place in Thüringia. There I became worse, and, therefore, went to Halle to consult Professor *W.*, who recommended me to try the air and beer of the Bavarian hills. I enjoyed both abundantly at Berchtesgaden and on the Tegernsee, and both were excellent in themselves, but—they did me no good! In my anxiety I sought the advice of Professor *von Z.* in Munich, a medical authority of the first rank. He emphatically repudiated the doctrine of the beer-cure, advocated by Professor *W.*, and counselled me to go to Reichenhall and try electricity there. I did so; taking a brine bath, and having myself electrified daily, but again without result! I then went to Berlin to Professor *T.* Once more electricity was recommended to me, and absolute rest for a year. The year passed, and still I could not speak. Next I tried, in 1880, a cold-water cure in Thale; then a homœopathic cure—all in vain.

The treatment on the principles of the Natural Method of Healing began in June, 1880, and was as follows: Frequent lukewarm baths, with thorough kneading of the body; gargling with cool water every hour; drawing-in (snuffing) lukewarm water into the nose; a gentle, wet rubbing of the whole body twice a day; vigorous rubbing of the legs and feet; remaining as long as possible in the open air, at work in the kitchen garden. After a time, a foot steam-bath in the evening, and leg and abdominal packs at night. The diet was entirely non-stimulating, and almost without meat—bread, fruit, and milk forming the chief articles of food, and proving easy of digestion.

In February, 1881, Pastor *St.* wrote: "I yesterday preached and administered Holy Communion in my church, and preached a trial sermon in a neighboring village. Thanks be to God!"

The full name of the reverend gentleman, and his consent to the publication of his case, are before the editor. (See also the reports of cases under "Watering Places.")

HÆMATURIA arises from congestion of or injuries to the kidneys, from stone in the kidney, from the use of powerful diuretics, such as cantharides, oil of turpentine, etc., whereby the blood is withdrawn from the bladder as well as from the kidneys; from injury to the bladder, either internally from calculus, or externally from a blow or pressure, in consequence of ulceration of the mucous membrane of the bladder, owing to suppressed bleeding; from piles or menses; or from diseases of the urethral canal. Hæmaturia also occurs in consequence of general faulty condition of the blood, of sexual excesses (*e. g.*, excessive cohabitation), and general debility of the urinary organs.

SYMPTOMS.—In order to facilitate the determination of the seat of the malady, we subjoin the distinguishing symptoms.

Hemorrhage from the cellular tissue of the kidneys. Very small quantities of blood are passed, closely mingled with the urine. If a small quantity of the urine be boiled in a test-tube, a white sediment is formed, consisting of albumen. Microscopic examination reveals cylindrical debris from the mucous membrane and fibrous filaments.

Hemorrhage from the basin of the kidneys. This is mainly due to stone in the kidney, shown by fragments of gravel and stone. Colic-like pains in the region of the kidneys are accompanying symptoms in this case.

Hemorrhage from the bladder. Here the urine is clear at first; afterwards larger quantities of blood make their appearance either clear and unmingled, or coagulated. Pain is felt in the region of the bladder.

Hemorrhage from the urethral canal. The urine is clear, the last drops only being mingled with blood. Burning pain is felt in the urethra.

TREATMENT.—A hip-bath of 100° to be given at the commencement of the hemorrhage for ten minutes or until the pains subside. Compresses of 77° over the region of the kidneys and the bladder and on the genitals; hourly bathing of the abdomen, especially the affected parts, with water of 66°. Absolute rest in a lateral position. Free use of cold water internally. Mild sweating treatment by means of daily three-quarter or full packs for the purpose of relieving the urinary organs, especially from acidiferous matter.

By these means the solution of stones in the bladder and kidneys can be effected without having recourse to an operation, if the application of water be combined with a strict diet. Only an entirely non-stimulating or vegetable diet must be allowed. Milk is the best beverage in these cases. See also Hyperæmia of the kidneys. (For Modes of Application, see Index.)

HÆMOPHILIA. This disease, which arises from inherited predisposition, occurs more frequently, and in a more acute form, in individuals

whose parents or ancestors have indulged in the too free use of salt, as, in this way, the metallic portions of the tissues are destroyed, and the vessels are rendered liable to be easily torn. These effects are aided by a faulty diet and mode of living, and cause a tendency to hemorrhage, in many cases of little moment, but occasionally of a severe and intractable nature; it generally attacks children of the male sex. The hemorrhage makes its appearance after the most trifling injury, *e. g.*, a very slight cut, or puncture from a splinter, or sometimes even without any external cause. The seat of the disease may be in the nose, mouth, eyes, lungs, or urinary organs. Hemorrhage from any of these organs may, as already mentioned, arise frequently without any visible cause. It occurs most frequently in parts which have received wounds, as the injured vessels cannot oppose a sufficient resistance to the pressure of the blood.

TREATMENT.—The treatment should principally be directed toward improving the condition of the blood, and rendering the blood vessels more capable of resistance; hence abundance of fresh air by day and night (sleeping with the window open), a cool pillow, non-stimulating diet (containing an adequate quantity of the nutritive salts), attention to the skin (by means of ablutions or baths) are advisable for a considerable time. Strengthening treatment should be resorted to in severe cases.

In local hemorrhages quite cold bandages are to be applied, or the affected part should, if possible, be held in very cold water. Hot water is still more efficacious than cold water. In cases of severe hemorrhage, efforts should be made to stop the bleeding by pressure with the finger. Bleeding from the nose may sometimes be stopped by inserting a plug of cotton wool or putting a finger upon it.

In case of increased action of the heart, cooling or soothing compresses should be applied over that organ. See also "HEMORRHAGE."

HOMEOPATHY. This system, as the word implies, aims at curing "like by like;" in other words, at curing the disease by some remedy bearing a relationship to it.

Homeopathy differs from allopathy (the current or orthodox medical practice) less in the nature of the remedies, which it employs, than in the fact that it employs these remedies in much smaller doses. For instance, the hundredth or thousandth part of the usual dose is sometimes given.

We look with disfavor on the employment of drugs and internal remedies, whether administered on the allopathic or the homeopathic system, as the Natural Method of Healing renders their administration scarcely ever necessary, and can, at the same time, boast of far greater success than the two systems we have named. Nevertheless, I would not

maintain the principle that under no circumstances should drugs ever be given; in some cases a homeopathic remedy may prove of service, as an internally administered remedy may be brought into more immediate contact with some deep-seated diseased or inactive organ, and may thus be better able to soothe it or to stimulate it to the exercise of its functions of secretion, excretion, etc.

We would refer, as an example, to many cases of obstinate constipation which can be cured with comparative ease by an internal remedy. Also to the expulsion of tapeworms and other intestinal parasites, and to the attenuation or neutralization of a poison by the prompt administration of an antidote. Medicines may also be of service in many other diseases. In our opinion, therefore, the few injurious substances which are introduced into the system by the administration of homeopathic doses may, on some occasions, be productive of more benefit than harm. For a homeopathic remedy, taken in a considerably attenuated form, is, perhaps, not more injurious than a cup of strong tea or coffee, a cigar, or a glass of spirits, whereby we also daily introduce poisonous or irritant substances into our bodies. If, therefore, many diseases can be successfully treated by homeopathic remedies (a fact which, not being homeopathists ourselves, we will neither assert nor deny, but leave the verdict to the future), there is no reason why their use should be opposed on principle, especially as the excretory functions of the skin are trained to such a degree of perfection by our method, that injurious substances introduced on exceptional occasions into the system for healing purposes are rapidly eliminated.

I am entirely opposed, at the same time, to resorting to homeopathic remedies in every disease. The foregoing remarks are only intended to be applied to exceptional cases.

Hahnemann, the founder of this system, was born at Meissen, in Saxony, in 1755. He was the son of a poor china painter, and showed signs early in life of remarkable intellectual powers, distinguishing himself at the Fürstenschule at Meissen by his talents, his capacity for work, and his extensive knowledge. After leaving school, he went to the University of Leipzig, in 1775, to study medicine. He obtained his medical degree in 1779, and practised for about ten years in various towns in Germany. He could, however, find no satisfaction in the exercise of his profession. The medical art of the schools, which, in accordance with the traditions of the time, aimed at curing diseases by bleeding, by debilitating purgatives, and by the copious use of drugs, could not satisfy so acute a mind as *Hahnemann's*. He gave up his practice, occupying himself for a long time exclusively with the writing of medical treatises. His writings, on account of the ability which they displayed and, also, on account of their admirable style, at first met with cordial recognition from the medical world. This

recognition was, however, soon changed into fanatical hatred when *H.* ventured unsparingly to expose the faults and mischievous absurdities of what was then considered the only correct science of medicine. The abuse of drugs, especially, found in him an implacable enemy. Large doses, he declared, could have only an injurious effect on the body, while in regard to compound mixtures, only confused notions could result from their use, as it was impossible to distinguish the effects of the several ingredients. He, therefore, demanded that the effect of each medicine should be tested on the healthy body, in order that conclusions might be arrived at as to its effects in disease, and he himself made many experiments for this purpose. The results of these experiments formed the basis of his system. He discovered that large doses were not necessary for producing an effect on the body, and that small and even infinitesimal doses had this result, and that the influence of a drug was rendered more powerful in proportion as the dose was attenuated. This is the first principle of homeopathy. He, moreover, found in the course of his investigations, that certain medicines produced conditions in a healthy body, which bore a close resemblance to certain diseases; he ascertained, for example, that doses of quinine, administered to a healthy person, occasioned symptoms analogous to those of intermittent fever, and this discovery led him to the idea that medicines which were able to produce certain morbid conditions in a healthy body, would cure those conditions in disease. This is the second fundamental principle of homeopathy, to which it owes its name (***homoios***-like, ***pathos***-feeling).

Hahnemann constructed his new system on the basis of these two principles. The same thing, however, has happened to him that has happened to many others who have enriched medical science with new and valuable ideas. Minds of his class tend, on the one hand, to become one-sided, refusing to admit anything that does not square with the ideas they have formed, and, on the other hand, they are liable to carry their principles far beyond their legitimate extent. The latter was more or less the case with ***Hahnemann.***

With ***Hufeland, Hahnemann*** was the first to recognize the importance of diet. Like the Natural Healers of the present day, he laid great stress on nourishment, air, light, exercise, rest, cleanliness, etc.

In his writings he discusses fully the use of baths and their duration and temperature, and recognizes the beneficial effect of friction or rubbing the whole body to promote reaction.

As adherents of the Natural Method of Healing, we do not oppose homeopathy to the same extent as we do allopathy; in the first place, because the former pays more regard to hygiene (the science of the preservation of health), and, in the second place, because the attenuated doses, in

which homeopathic medicines are given, can scarcely ever do harm to the patient, while in many cases they produce a favorable effect. We hold the opinion at the same time, that many of the successful cures attributed to the use of homeopathic remedies are mainly due to the strict dietetic regulations enforced, and to the fact that the recuperative powers of the organism are not paralyzed by the attenuated homeopathic remedies, as they unfortunately often are by the strong allopathic medicines.

From the foregoing observations it will be evident that it is advisable to call in a homeopathic rather than an allopathic doctor, in case the services of a Natural Healer cannot be obtained.

HONEY. Honey is obtained by bees from the flowers of a number of plants. It undergoes a number of changes in the so-called honey-bag, and is finally collected in the cells of the comb.

Honey contains 19.61 per cent. of water, 1.20 per cent. of nitrogenous substance, 70.96 per cent. of fruit-sugar, 2.76 per cent. of cane-sugar, and 0.36 per cent. of waste matter.

Honey owes its high nutritive value and pleasant taste to the large proportion of fruit-sugar. The importance of cane or beet sugar as an article of nourishment is well known; it possesses, however, some unpleasant properties. It is apt to cause accumulations of mucus, and many persons are obliged to restrict its use on that account.

The fruit-sugar, contained in honey, has exactly the contrary effect. Honey, taken alone or dissolved in water, will loosen phlegm in the upper respiratory organs more effectually than any other remedy.

Cane-sugar also causes digestive disturbances in many persons. This is not the case with the fruit-sugar contained in honey. The use of honey has a beneficial effect on the digestion and appetite in people with weak stomachs. For this reason and on account of its nourishing properties, honey deserves a high place as an article of diet.

Horse-Radish Sauce, see Index.

Hospital Gangrene, see "MORTIFICATION."

Hot Baths, see Index.

Hot Food and Drink, Injuriousness of, see Index.

Hot and Warm Compresses, or Steam Compresses, see Index.

Human Skeleton, see "SKELETON."

Hunchback, see "SPINE, CURVATURE OF THE."

Hydropathy, see "COLD-WATER CURE."

HYDROPHOBIA is most frequently caused by the bite of rabid animals, *e. g.*, dogs, foxes, wolves, etc. The disease does not, as a rule, make its appearance until after the lapse of a fortnight to six weeks, but sometimes even after six to nine months, and even then it may be called forth by some subsidiary cause, such as a shock, sudden fit of anger, and the like.

According to *Bollinger*, only forty-seven per cent. of the persons bitten develop hydrophobia; the statistics of Wurtemberg give only twenty-three per cent.

SYMPTOMS.—Depression, anxiety, pains in the throat and nape, difficulty in breathing. The scar of the bite becomes sensitive again, gets red or bluish in color, and breaks open again. If it has not healed up yet, it gets gangrenous in appearance.

When the disease has fully broken out, the patient has cramp-like contractions of the throat, when any fluid comes in contact with the gullet, yea even at the thought of drinking and swallowing, for which reason he shrinks from quenching his raging thirst; hence the name hydrophobia. Anguish and convulsive efforts to breathe increase until the patient becomes raving mad, and, though in possession of full consciousness, becomes more and more violent, and emits a viscous foam often mingled with blood from his mouth, and finally, exhausted by repeated attacks which succeed each other with shorter intervals each time, sinks into a paralyzed state which invariably ends in death, owing to paralysis of the lungs and stoppage of circulation.

TREATMENT.—The bite of a mad dog is by no means so dangerous as is generally supposed, if proper measures be taken at once. To avert the danger, the wound should be washed with clean water as well as to cause blood to flow by pressure; then, as soon as possible, put a stimulating compress on and around the bitten place; the compress must be well closed and thickly covered with flannel. A steam-bath with an extra compress on the wound, followed by a stimulating full-pack, also with extra compress, is better still. For this may be substituted a steam-bath in bed, in order to make the patient perspire so as to expel the seething poison from the blood. The stimulating compresses or steam-baths in bed should be continued for some days, at the rate of one a day, as a measure of precaution.

But if the disease has set in, an attempt must be made to counteract the state of cramp in the gullet and the general nervous excitement, and this is best done by a vigorous wet rubbing of the whole body with a towel dipped in lukewarm water of—say—65° to 72°; or a washing glove, a brush, or even the bare hands may be used for this purpose. This wet rubbing is succeeded by a thick, dry full pack, a stimulating full pack, or a steam-bath in bed to stimulate perspiration.

If profuse perspiration sets in, the patient may be looked upon as saved.

It is advisable, however, to continue this treatment for a week or ten days, during which time from four to six wet rubbings of the whole body and the same number of steam-baths in bed should be given.

Several small cool enemata must be given daily. As, after the rubbings, the difficulties in swallowing are considerably modified, the patient should receive a sufficient quantity of water to drink or, until this can be done, an effort should be made to afford relief by means of an enema; at any rate, some fluid should be introduced into the bowels. In other respects easily digestible food should be given. Even though, in some cases, hydrophobia may not result in some persons from the bite of an undoubtedly mad dog in spite of the fact that no preventive measures were taken, still nobody should neglect to follow the hints here given for the sake of security, and apply the packs, etc., for some time at least. For Modes of Application, see Index.

Hydrops, see "Dropsy."

HYDROCEPHALUS, ACUTE, is a serious disease which may sometimes be congenital, and sometimes be developed after birth. It occurs more frequently in boys than in girls, and generally between the ages of two and seven.

Symptoms.—When the disease first makes its appearance the child becomes fretful and impatient, looks ailing, and is timid, upon which follows stupor and restlessness at night. The child often starts out of his sleep with a violent scream, lies on his stomach in bed, and either suffers from sleeplessness or sleeps too long, often falls asleep while playing, has no desire to get out of bed, is disinclined to move about.

These symptoms are the precursors of acute hydrocephalus or water in the head, and should not be taken too lightly by the parents. The child's gait becomes shuffling, so that it often falls by tripping over its own feet.

Later on, vomiting sets in, continual headache, costiveness, and the child becomes more and more querulous. The head begins to roll from side to side and fall back; it is hot to the touch, and grows to an abnormal size.

Finally loss of consciousness, symptoms of paralysis, and death may result.

Causes.—Tuberculosis or scrofula which is often inherited from the parents, also from too near a degree of consanguinity of the parents. Overfeeding as well as inappropriate and too rich nourishment, stuffy dwellings, coddling, and want of attention to cutaneous action.

The principal factor in water in the head is violent determination of blood to the head and the extreme irritability of the brain; everything, therefore, which tends to increase the flow of blood to the head may easily produce this disease, *e. g.*, serious injury to the head by a blow or fall, concussion of the brain by being dropped or rocked too violently, administration of soothing drugs (laudanum), continuous violent screaming, mental exertion at an early age, heatening drinks, abuse of emetics, difficulty in teething, whooping cough, fevers, such as scarlet-fever measles, chicken pox, etc.

TREATMENT.—Strictly non-stimulating diet, plenty of exercise in the open air, fresh pure air in the house, sleeping with the window open. Careful attention to cutaneous action and keeping the head cool (it is better to wear no covering on the head), cool bed, a horse-hair, straw or hay pillow should be substituted for a feather pillow, and regular motions ensured by enemata. Moreover, daily one or two lukewarm (71°) washings of the whole body, in which the spine should be particularly well washed and rubbed. Frequent cool washing of the head; nothing warm should be taken just before going to bed. An abdominal compress should be worn in the night, and a derivative treatment applied three or four times a week, in the form of a gentle foot steam-bath or compress on the feet at night (put on wet stockings), both to be followed by wet rubbing (68° to 72°).

As irrational diet is frequently the cause of this malady, children, who suffer from it, should be fed exclusively on the mother's milk, or have a wet nurse, and should be suckled as long as possible. In default of this, the principal nourishment should be the milk of a healthy cow, sweetened with a little sugar. Such children should be spared all mental exertion until well developed. (For Modes of Application, see Index.)

HYDROCEPHALUS, CHRONIC, or Dropsy of the Brain, may also develop either before or after birth.

SYMPTOMS.—This malady arises in consequence of the collection in the cerebral cavity, and between the meninx, of a watery fluid, containing blood. The child's head is large, and out of all proportion, so that it can seldom be held upright; moreover, small wizened appearance of the features, half-closed eyes, bent body, weak intellect, etc.; see above. As a rule, such children die early, and it is very exceptional if a child, suffering from this disease, lives beyond the age of ten.

CAUSES—are partly those mentioned above, and it may be assumed that advanced age of the parents at the time of conception as well as syphilis, etc., also cause this malady.

TREATMENT.—As in the acute form.

Hydrotherapeutics, see "COLD-WATER CURE."

HYGIENE means the science of health. By it is understood, firstly, the fathoming of the beneficial and injurious influences which are of importance to health in general, and, secondly, dietetics, the art of preserving life, in respect to suitable dwellings, clothing, nourishment, cutaneous action, care of the body, and proper mode of living, whereby health may be sustained, and, if lost, regained.

HYPERÆMIA is an excessive morbid accumulation of blood in a particular organ.

TREATMENT.—In general a very moderate, mixed, or non-stimulating diet, in some cases an invalid's diet, the use of fresh water as a beverage when required, plenty of fresh air, and open windows at night. Also abundant, but moderate exercise; occasional stimulating full packs or steam-baths in bed, followed by a bath of 89° or wet rubbing of the whole body with lukewarm water (89°) and an abdominal compress at night. In case of hyperæmia of the brain, spine, lungs, liver, spleen, etc., a derivative treatment should be employed, consisting of stimulating foot or leg packs, hip-baths, Kneipp shallow-baths, or foot steam-baths, etc.; cold or cool compresses being applied to the affected parts. Stimulating three-quarter or half packs are also advisable; they must, however, always be combined with sufficiency of cool extra compresses over the congested organs. These compresses may also be used in combination with the above-mentioned full packs or steam-baths in bed. Small lukewarm enemata, from three to six daily, may be given for derivative purposes, with large enemata for the avoidance of constipation.

Treatment by massage consists in these cases of derivative massage, especially vigorous kneading of the arms and legs. Curative gymnastics should be employed in congestions of the internal organs (Groups III—VI). For Methods of Application, see Index.

Hypermetropia, see "EYE, DISEASES OF THE."

HYPNOTISM—SUGGESTION. Not till recently has hypnotic suggestion been added to the remedial agents of the Natural Method of Healing. Nevertheless, hypnotism is one of the oldest sciences in the world, and an acquaintance with it can be proved to have existed even among prehistoric races (Arcadians, Indians). It appears running like a red thread through the history of the old Egyptians, Assyrians, Jews, Greeks, and Romans, gradually vanishing under the influence of Christianity. In the Middle Ages the knowledge of the remarkable phenomena, comprehended under

the title of "Hypnotism," was confined to the monasteries, whence it was carried to remote parts of the earth by Jesuit missionaries. Monks and priests, however, did not understand the real value of hypnotism, employing it, like the Brahmins, exclusively in the service of religion. The Jesuit *Gassner*, it is true, discovered the healing effects of hypnotic suggestion in the early part of the last century, but he attributed these effects to exorcism (driving out of devils). He thought that the sick people, whom he cured, had been possessed by the evil one, whom, by the help of God, he had succeeded in expelling. The first scientific investigation of hypnotism was made by an English physician, *James Braid* of Manchester, in the fourth decade of the present century. The latter accidentally made the discovery that a peculiar condition resembling sleep could be induced by gazing at a fixed object, especially a bright object, and that people in this condition, which he called hypnosis (from *hypnos*, sleep), could be influenced in various ways by the operator. He succeeded, for instance, in extracting a hollow tooth, also in amputating a diseased thumb from patients during a hypnotic sleep, without giving them any considerable amount of pain. *Braid* further proved that hypnosis could not always be induced at a first attempt, but that from three to ten attempts were often necessary, also that the sleep was not equally profound in all cases.

Braid's work, however, met with but little attention from the medical profession, and our knowledge of medical hypnotism is mainly due to the researches of two French investigators, *Azam* of Bordeaux and *Liebault* of Nancy. The latter, after many experiments, first propounded the opinion, which he subsequently established on a scientific basis, that it is possible, when the condition of artificial sleep—which we term hypnosis—has been induced, to exercise a favorable influence on morbid symptoms and on the brain of hypnotic subjects. Though received at first with derision and afterwards with fanatical hostility, the therapeutics of hypnotism or suggestion have attained an honorable position in the science of healing, and have, moreover, thrown a welcome light on many physical processes hitherto veiled in obscurity. It must not be supposed, however, that any identity exists between hypnosis and the phenomena of spiritualism, as often asserted by people unacquainted with the subject. We will endeavor to give a definition of the apparently marvelous phenomena of hypnotism, which will convince the reader that we are dealing with entirely natural processes. We must, first of all, make it clear that it is not the hypnotic sleep in itself, which produces the cure; the healing element lies in (the curative agent is) suggestion. The object of hypnotic sleep is merely to make the patient susceptible to suggestion, to induce a condition of suggestibility. It follows that sleep is not an indispensable condition in all cases, and that it is possible for suggestions to be received in a waking

condition. If I want to convince anybody of a fact, it is necessary to make an assertion and put it in such a convincing manner, that it appears credible and is actually believed. We must further inquire, how far it is possible for an idea, which has taken root in our mind, to influence our bodily state.

In the middle of the present century, the fact that physical disorder could be produced by mental ideas, was regarded by medical science as indisputable, and more recently the tendency has been more and more in favor of this view. It is well known that mental influences can have powerful effects on our bodies. We may refer to the paralyzing effect of a shock, the injurious effect of mental trouble on the digestion, the enlivening influence of pleasure, etc. Terror, anxiety, pleasure belong to the world of ideas, and have primarily no connection with our bodies. They find a place in our mind by means of letters, personal communications, external impressions—suggestions.

The representation produced in the mind by the vivid description of a disgusting object can occasion vomiting, loss of appetite, and even jaundice. It has even been proved that cancerous growths may originate, in great measure, in trouble and anxiety. And is not weeping at sad news or at the description of a touching scene an instance of a bodily effect arising from an idea?

We see, therefore, that serious disturbances and manifestations of disease may occur in the bodily conditions of a healthy man in consequence of something going on in his mind, some picture called up in his imagination, some idea implanted in his brain.

Is it, then, a far-fetched notion that, in the cases in question, the patient should recover if we can succeed in making him forget his cares and anxieties, or in changing the feeling of disgust into one of pleasure? And in what better or shorter way could that be done than by the aid of persuasion; written or verbal suggestion? Most of the phenomena of diseases, however, are founded on ideas. Pain, for example, is largely a matter of idea. We do not feel the severest wound, before the effect of it has been brought into our consciousness. It is only when we see the wound that the idea of pain is developed in the brain; then we feel it. As a proof we may refer to the fact that soldiers wounded in battle often go on marching for a long time without feeling any pain. Only when one of their comrades draws their attention to the blood streaming out of the wound, do they feel pain, and the collateral symptoms of severe wounding force themselves into consciousness.

By physical activity forces are set in motion which produce effects in various parts of the body, scarcely obtainable by any other means.

But these effects are not in themselves very wonderful; nor do they, as is often asserted, trench on the domain of occult science. No occult origin need be assumed for them, for they can be accounted for by well-known physiological laws. Every psychological or physiological effect, which we expect to take place in our bodies, has a tendency to appear there, or, in other words, every idea implanted in the brain strives to transform itself into an action.

In these words lies the whole secret of influence by suggestion. It is, at the same time, evident from what has been said, that every idea must first have taken firm root in the mind; the mere communication of an idea is not sufficient, it must also be believed. I can only expect what I firmly believe will happen; only what is expected can be realized.

We are, however, not always in a state of mind to believe everything. Our critical faculty rejects everything which appears to it incredible. If, therefore, it be desired to force an idea upon a man, it is necessary as far as possible to suspend this faculty.

We know that the critical faculty is least active in sleep; this is proved by our dreams. When asleep, the most impossible dream appears natural, and the events, that take place in it, perfectly possible. If, therefore, sleep represents a condition of increased credulity or rather of increased suggestibility, we must use this condition as our best means for introducing ideas for communicating suggestions. Sleep alone, however, does not always enable us to establish a relation between our mind and that of the sleeper. The ideas of the latter are mostly turned away from his environment, and change their direction, so to speak, a fact which we become aware of as occurring every night in our dreams. It will, therefore, be necessary to turn the thoughts of the sleeper in the direction of the suggestion which we wish to make. For this a previous connection, a *rapport* as it is called, is requisite—we want, therefore, sleep and hypnotic *rapport*. How this *rapport* is established, we will explain below. It is clear that the method, at all times difficult, of establishing a connection of ideas with the sleeper, is not always possible of application. The endeavor had, therefore, to be made to induce sleep artificially, and the question arose, how such a condition was to be brought about. There could only be one reply:—In accordance with the law already stated that a physiological or psychological event which we expect to happen will happen, the expected sleep will certainly follow, and so, in fact, it does follow.

It may possibly be objected, by those subject to insomnia, "every night I expect to sleep, and sleep refuses to come in spite of my earnest expectation—on the contray, I toss about for hours." Granted, but the sufferer does not *expect* his sleep, he only wishes for it. Desire and ex-

pectation are two entirely different things. Whereas a man in good health puts himself into the posture best adapted to sleep, in the confident expectation that he will be asleep in a few minutes, the sufferer from sleeplessness goes to bed with the certain anxious expectation of lying awake for hours. This anxiety about not being able to go to sleep is just the counter suggestion which must be fought against. If, therefore, we want to produce either natural or hypnotic sleep, we have to implant in the consciousness of the patient the confident expectation that sleep will come. For this object we shall have to employ various means of which we shall treat under "METHODS OF PRODUCING SLEEP." First of all we give a few hints in the shape of rules for those desiring to apply hypnotism.

AXIOMS.

1. Never hypnotize anyone without their consent or the consent of those responsible for them.

2. In the interest of the operator, as well as of the patient, hypnotic sleep should never be induced except in the presence of a third party, such as a father, husband or other trustworthy person. He will thus be protected against unpleasant imputations and accusations, as well as against any suspicion of attempting any action not necessitated by the treatment.

3. Do not communicate any suggestions other than those necessary for the treatment. A doctor has no rights except those conceded by the patient; he must confine himself to therapeutical suggestion, and must refrain from making any experiments, even in the interests of science, except with the express consent of the patient. Neither should the operator use his influence over the patient to obtain his consent, if he has reason to apprehend the smallest unpleasant consequence from the experiment which he contemplates making.

4. Hypnosis is not a morbid condition or a degenerate variety of hysteria, but a physiological state like sleep, out of which it can grow. It is assumed that natural symptoms and hypnotic sleep are of the same nature, as the symptoms in each are similar throughout, and the suspension of voluntary thought forms the characteristic feature of both conditions.

5. Sleep and hypnosis only differ in this respect, that in the former the idea of the appearance of sleep is generated by the subject himself (self-suggestion, or auto-suggestion), whereas in the latter this idea is suggested by another person (external suggestion, or hetero-suggestion).

6. The real agent in the production of sleep is not the hypnotist, but the subject; it is his own belief which causes him to sleep.

7. Nobody can be hypnotized against his will, or who resists the efforts to hypnotize him.

8. The duration and intensity of the hypnosis are under the control of the hypnotist.

9. If it be desired to render the hypnosis more profound, the subject must be awakened and re-hypnotized. Magnetic passes intensify the hypnosis.

10. See that the patient be not incommoded by heavy or tight-fitting clothing. Ladies should be induced to unlace or entirely remove the corset.

11. Intelligent, active, energetic people, with lively power of imagination, also those accustomed to control themselves or obey orders (soldiers, laborers, students in military academies) are easy to hypnotize. It is a remarkable fact that I have found eighty per cent. of compositors to be hypnotizable.

12. Old men, with sluggish brains, idiots, maniacs, hypochondriacs, and those given to analyzing their sensations are, on the other hand, difficult to hypnotize. Nervous or hysterical people are also refractory subjects. Healthy, energetic people with strong nerves are the easiest to hypnotize.

13. Very few people can be hypnotized at a first attempt. Generally three or four, and often twenty or thirty attempts are necessary.

14. Children between the ages of four and fifteen are almost invariably hypnotizable. The susceptibility to hypnotism is very great up to the age of thirty, after that age it declines without, however, completely vanishing.

15. Many imagine that they have not slept because they remember to have heard everything. They are under the impression that they have simulated the hypnotic condition, and can with difficulty be persuaded that they have been influenced.

16. It sometimes happens that people who have been successfully hypnotized, afterward lose their susceptibility.

17. Persons in a state of intoxication are easily susceptible to suggestions, but are at the same time unfavorable subjects. The hypnotist should avoid hypnotizing a person after a heavy meal. A man always sleeps badly after a heavy meal, and will be inclined to make hypnotism responsible for the consequences of his own excess.

18. When inducing hypnosis by means of fixation, avoid using an intensely bright object and let the subject hold it himself and not above

the level of his eyes, in order to avoid irritation of the retina as well as artificially producing squinting.

19. Three conditions are necessary for a successful hypnotizer: (1) will, strength and perseverance in applying the treatment; (2) a strong conviction of the power of hypnotic suggestion, and (3) confidence in the success of the treatment. A man who is not inspired with an earnest desire to help and benefit, and who does not at the same time possess patience, calmness, energy and persistence, an even temper and unselfishness, should never try to experiment with hypnotism. It is too serious a matter for play.

20. The hypnotist should never interrupt the *rapport*, but maintain control over it, never leaving the subject to himself.

21. Heavy breathing sometimes occurs at the beginning of hypnosis, when the patient is in an uncomfortable posture, or when the temperature of the room is unsuitable. I have never noticed heavy breathing at a temperature of 66° to 71°.

22. Some people are easy to hypnotize but at the same time not very susceptible to suggestion. This susceptibility is not always dependent on the intensity of the hypnosis. The effects of suggestion are most marked during the somnambulic stages; but surprising results can also be obtained during less profound hypnosis.

23. Communicate your suggestions gently and calmly. Every manifestation of hurry, or overeagerness has a disturbing effect on the patient and may bring on a fainting fit.

24. Never make suggestions for healing or training purposes at a first sitting; confine yourself to intensifying the hypnosis and to eliminating any injurious influence by suggestions.

25. Should symptoms of nausea appear at the first sitting, make a counter suggestion and wake the patient; if sickness should occur (*e. g.*, in case of drunkeness), the subject will generally wake by himself, if not, he must be roused at once. If convulsions should arise, do not awaken the patient, but make suitable counter suggestions; not till complete calm has been restored should the patient be awakened. This rule should also be observed in cases of fainting.

26. After the patient has been awakened, keep his attention occupied for a short time and continue to make suggestions. Tell him that every feeling of fatigue has vanished. Do not dismiss him till you have satisfied yourself that he is thoroughly and completely awake. For in the same way that a man awakened suddenly from natural sleep is confused, dazed and giddy, and stumbles about the room for a moment or two, so physiological derangements have been observed on people too suddenly roused from a hypnotic sleep.

27. Hypnotic influence is entirely harmless, even when exerted in the same individual hundreds of times for years together.

28. Fears of the abuse of hypnotism are exaggerated. Permanent loss of memory is impossible, even after the most profound hypnosis. In many cases, after a few hours, generally after several days, in any case after several months, all that has happened during the hypnotic state, also all realized past hypnotic suggestions, will come back to memory. The most energetic commands to loss of memory are useless. In every case the man who employs hypnotism for criminal purposes is sure of detection.

29. Hypnotics only obey suggestions which are agreeable to them or to which they are agreeable, or to which they are indifferent, and which are made to them by a person with whom they feel in sympathy *(Brouardel)*. Somnambulists are not mere automata, absolutely subject to the will of the hypnotist; they are capable of resistance *(Bernheim, Beaunis, Liebeault, Liegeois)*.

30. It is desirable that everyone , man or woman, should ascertain whether he is capable of being put into a hypnotic condition (*Liegeois*).

METHODS OF INDUCING HYPNOSIS.

There is a great variety in the methods of inducing hypnosis, it would indeed scarcely be too much to say that every hypnotizer has his own method. Twenty-two methods are at present known, most of which, however, are difficult of execution and not very reliable. For unprofessional readers a description of the simplest and safest of these methods will suffice.

The oldest method of hypnotizing, and one which can generally be depended upon, even in very refractory cases, is,

Braid's Method (see Figs. 208 and 209). A small glass knob, a pencil with a metal head or some other bright object is held in front of the eyes of the subject in such a manner that they are directed slightly upwards. The distance at which the object is held must not be more than three inches from the root of the nose. Fixed gazing at an object causes the attention to be concentrated on the sensation of vision, and to be diverted from impressions coming from the other organs of sense. This diversion is aided by monotonous stimulation of the other senses. When the fixed gazing has continued long enough the eye gets fatigued, the mind is diverted from this organ also and is now in that condition of complete abstraction from the sensory centres which happens normally and physiologically during sleep, the body becoming an automatic reflex machine. Sleep is generally induced in one or two minutes. Fixation should not

be continued longer than seven to eight minutes, but another method tried.

Gessmann's Method. An author named *Gessmann,* of Graz, has an original method which is said to be very effective. He describes it in his book as follows: I select from the company a woman of pale and nervous appearance and dreamy eyes. I tell her that there is an abundant development of electricity in my constitution which enables me to electrify those who are not very robust. To prove my words, I get her to take two fingers of my right hand in her two hands, and, after a pause of a few minutes, I ask her whether she feels anything. If she is hypnotizable,



Fig. 208.



Fig. 209.

she will generally reply that she has a kind of sleepy feeling about her arms and the upper part of her body, and a sensation as if ants were crawling over them. I then cry, "hold my hand tight—tighter—tighter still—now you can't let it go," which is the case. By making passes with my left hand over her arm, I increase the cataleptic condition of the muscles, so that she cannot release my hand even when I command her to do so. This condition is dispelled as soon as I blow upon her hands and assure her that she is free. This last convinces me that she is susceptible to hypnotism, which is then carried out in the following manner.—I sit down opposite to her, tell her to close her eyes, take her

hands in mine in such a way that the four thumbs are pressed against each other, and request her to be calm and to yield without resistance to the inclination of sleep. As soon as sleep has set in—which occurs usually in from two to ten minutes—I deepen the sleep by means of a few passes over the head and chest and endeavor to get the patient to talk, which I succeed in doing by placing one of my hands on her head, taking one of hers in the other and asking the question, near the pit of the stomach: "Do you hear me?" This question has often to be repeated four or five times before I receive a low reply. Now the moment has



Fig. 210.

arrived for making further experiments; it is not advisable, however, to proceed further at the first attempt, for fear of fatiguing the patient.

Bernheim's Method. The following is Prof *Bernheim's* method of hypnotizing. Having explained the object of the process to the patient, the operator places him in a position favorable for sleep, and tells him to fix his gaze on a finger held over the root of the nose The imagination of the subject is now directed to the advent of sleep in the following manner:

(1) Think of nothing but that you are to go to sleep

(2) Now the eyes are growing fatigued, the lids are quivering.
(3) You feel tired all over.
(4) Your arms and legs are going to sleep.
(5) Your eyes water, you are looking heavy and tired.
(6) Now your eyes close.
(7) You cannot open them any more.
(8) You are asleep.

Dr. *Liebeault's Method* (see Fig. 211.) Dr. *Liebeault* places his hand on the patient's forehead, and then gently closes his eyes and makes the same suggestions as above (omitting Nos. 2, 5 and 6), gradually lowering his voice at the same time.



Fig. 211.

It will be seen that nearly every hypnotizer has his own system. But is is impossible to apply one method successfully in all cases. The hypnotist must beware of generalizing, he must individualize even more than a doctor. *Gerling* has used a mixed method with success, and I am convinced that every hypnotist will obtain good results with it. Although I believe that there are hypnotists in other countries who prefer this method, I will nevertheless describe it as

Gerling's Method. Gerling gets the patient comfortably seated in a chair, armchair or sofa (if possible with his back to the light, or in a slightly darkened room) and tells him in as calm and even a voice as possible to pay great attention to his words, and expect sleep and at the same time to look at his eyes. Occasionally (especially with nervous subjects) the act of swallowing has to be avoided; this hastens the hypnotic condition. Then the operator places his hands gently on those of the patient and first suggests a feeling of warmth in the backs of the hands, and then of heaviness in the limbs. He next raises his hands, gazing all the time steadily into the eyes of the subject and makes slow passes from the head to the region of the stomach, giving further suggestions for sleep, as in

Bernheim's and *Liebeault's* system. As soon as symptoms of fatigue appear, the operator, while continuing the fixation and suggestions (the patient must constantly have his attention fixed on the idea of sleep) places his right hand gently on the patient's head, draws the skin of the forehead slightly downward to produce a sensation of heaviness in the eyelids, and slowly closes the eyes. Then a slight pressure on the eyeballs, followed by the confident but calm suggestion, "Now you are asleep," and the result is obtained.

There are people, however, in whom the hypnotic condition cannot be induced, whatever the method adopted. The non-professional hypnotist will do well, after a number of unsuccessful attempts, to abandon such cases. As a consolation to such refractory or unsuggestible subjects we may, however, mention that the hypnotizer has other, though not perhaps such harmless means at his command.

If the reader be absolutely bent on inducing hypnosis, I will, in conclusion, recommend one more method, which will certainly seem difficult and troublesome, but which, in almost all cases, will lead to the desired result. I mean the transformation of normal into hypnotic sleep by means of suggestion.

Profs. *Bernheim* and *Liebeault* both maintain, in opposition to other authorities, the identical character of normal and hypnotic sleep. But if normal sleep be identical with hypnosis, the sleeper must be susceptible to suggestions. This is really the case. All that has to be done is to establish the rapport.

The hypnotist must carefully approach the sleeper, satisfy himself as to the depth of the sleep; and, if necessary, deepen it by means of mesmeric (magnetic) passes. He then addresses the sleeper in a very low tone (directing his voice by preference towards the pit of the stomach), very gently and calmly, in order that the sound waves may not awaken the patient. Deep sleep should first be suggested, for example, in the following manner:

"Your sleep is calm and deep. You cannot awake, but you hear my words distinctly."

If a "yes" does not immediately follow, the operator should repeat the suggestion, avoiding, however, to mention the name of the sleeper.

As soon as the sleeper replies with "yes"—"hm"—"well?" (an unintelligible murmur is often enough), the rapport is established, and the suggestions should now be made in a low voice, but confidentially and clearly; with proper care the object will, in most instances, be gained in this manner.

Hypnotic sleep is not equally deep in all cases. Five stages of hypnosis can be distinguished, a classification of which may be of interest to the reader (a fact which is, at all events, interesting).

STAGE I.—Drowsiness or lethargy, heaviness of the eyelids, incapacity to open the eyes (not invariable); feelings of lassitude; complete retention of consciousness. This stage is the most common, especially with women.

STAGE II.—Catalepsy. If a limb, *e. g.*, an arm, be raised, it remains for a few seconds in its new position, and then oscillates and falls down. The fingers do not remain in the positions, in which they are placed. The eyelids are closed, and the limbs relaxed. Connection with the external world is completely maintained, and memory and consciousness are unimpaired.

STAGE III.—Automatic movements. If we turn the arms of a hypnotic in this stage round and round each other, he will continue the movement if he is told that he cannot prevent it; suggested contractions of the muscles, lowered sensibility. Other symptoms, as in Stage II. Consciousness intact. Most hypnotics, on awakening from the first three stages of hypnosis, declare that they have not slept at all, but have obeyed the suggestions made to them, as a favor to the hypnotist.

STAGE IV.—Light somnambulism. Sensibility lowered or entirely suspended. Hallucinations by suggestion often possible. Consciousness dimmed, memory confused.

STAGE V.—Deep somnambulism. All the symptoms of the fourth stage in a more pronounced form. The consciousness is totally suspended, and on awaking there is complete loss of memory as to what has passed during the hypnosis.

It is certain that suggestions are most readily accepted during the two deepest stages of hypnosis; the second, and particularly the third, stage is, however, often deep enough for a permanent success. More important, however, than the above classification is the right method of waking. This is done in the following manner: When the therapeutical suggestions are ended, the patient is allowed to sleep for another five or ten minutes, after which the hypnotist says:—

"Now I am going to wake you."

"As soon as I have counted up to three, you will awake and will feel no fatigue or heaviness in the limbs."

"You feel that you have lost all sensation of discomfort, heaviness and fatigue." Here a few passes should be made over the body.

"When you awake, you will feel quite well, free from any pain of discomfort, and be very careful. You will sleep particularly well to-night,

and follow your occupation to-morrow with usual energy." As soon as the sleeper replies that he feels no sensation of discomfort, the operator proceeds.

"One!—Fatigue and heaviness are gone."

"Two!—Your good spirits have returned."

"Three!—You are awake and feel well."

If these directions be followed, the awakening will follow promptly, and no further suggestions will be necessary.

Should the subject, previous to hypnosis, be suffering from the effects of overwork or excess in drinking, a feeling of fatigue will sometimes remain. In this case, he should again be hypnotized and the suggestions repeated, with the additional suggestion that he has now slept long enough, and, finally, the assurance should be confidentially given that the fatigue has entirely vanished. Force should never be employed; it is injurious and fails in its object. Shaking, shouting, wet bandages, and sprinkling with cold water are useless.

The communication of suggestions is of special importance, and I will give a few hints on the subject. No rigid and universally applicable rules can be given; the suggestions must be varied to suit each individual case. The axioms given above will show the fundamental principles of the art of making suggestions, and the following hints may serve as a guide for the intelligent, unprofessional reader. A suggestion against insomnia should be given somewhat in the following manner.—As soon as hypnosis has been induced (the second or third stage will be deep enough for the following suggestion in most cases), say to the patient after he has been asleep for five or ten minutes:—"You will have a rapidly growing feeling of fatigue to-night at the time when you generally go to bed (ten, eleven or twelve, as the case may be), in consequence of which you will undress and go to bed. As soon as you have got into a comfortable position, you will think of what I am now telling you. Your eyes will get heavy, a feeling of sleepiness and fatigue will weigh like lead on your eyelids, and descend to your neck and arms. You already feel, how heavy they will become. This sensation of weight and fatigue will also spread to your lower extremeties. Your breathing will become deep and regular, you will feel the approach of sleep. A dark veil will appear before your eyes. Your eyes will close, your consciousness disappear, and you will sleep soundly."

If this suggestion should take effect, it may be repeated, with the addition that the sleep is to last till a certain hour, and leave a feeling of strength and freshness. In a case of constipation, the hypnotist, according to Forel, should proceed as follows:—

As soon as the patient is asleep, the abdomen should be very gently rubbed and kneaded, without removing the clothes, and the suggestion made that a pleasant sensation of warmth will be felt. As soon as this is confirmed, the operator gives the assurance that now the bowels will be stimulated by the action on the nervous system. There was only a sluggishness of the bowels, which will act regularly for the following week. The patient will now feel a necessity of relieving the bowels every morning, half an hour after rising. He will yield to this necessity, and the bowels will always continue to act without any other remedy.

If this suggestion should be effective, it may be followed by another, *i. e.*, that now the constipation has been permanently removed. The reader will be able, with these hints, to find the right method, but the suggestion must always be adapted to the intelligence and degree of education of the subject.

If the patient has to be cured of dypsomania, the hypnotist must not at once forbid the use of alcoholic drinks, but begin by suggesting that they be consumed at certain fixed times. Later on, disgust at alcoholic drinks may be suggested, rising to nausea, and when several weeks have passed and the patient has no more inclination for these drinks, the use of alcoholic drinks may be forbidden entirely.

A teacher or father must proceed on the same principle in curing faults and bad habits of children. The child must first be convinced of the ugliness of the habit in question, and the habit be prohibited as soon as this conviction has taken root, and only the moral weakness remains to be dealt with.

Should the child be addicted to wetting his bed, one must, of course, not suggest an immediate discontinuance. It must be suggested to the child to wake as soon as the desire to urinate makes itself felt, so that he may either call for assistance or satisfy the desire himself in the proper manner.

In dealing with habits of falsehood in a child, the latter should be convinced, during hypnosis, of the repulsive character and evil consequences of this vice. The impression thus made is far deeper and more permanent than the same warning addressed to him in his waking condition. Later on, violent blushing, uneasiness, and trembling, after telling a lie, may be suggested. Should this prove effective, the further suggestion may be made that the trembling and uneasy feeling will take place whenever a lie is contemplated, and that his state of mind will be intolerable, whereas speaking the truth will bring immediate relief and feeling of comfort.

Left-handedness can best be cured by suggesting a momentary paralysis in the left arm whenever the child tries to use the left hand for doing what should properly be performed with the right. At the same time the suggestion should be added, that the right hand can be easily and freely moved and used.

In cases of digestive derangements of nervous origin, disorders of the stomach, etc. (not, however, with abdominal tumors, cancer, etc.), the suggestions should be aided by application of the electric current. It is also advisable to employ the faradic brush, during hypnosis, in cases of sciatica.

Excessive catamenia in women should be treated by, first, suggesting a sensation of warmth in the abdomen and back. When this has set in, both hands should be placed on the abdomen, which should be gently massaged in an upward direction, the suggestion being made at the same time that the blood is now being directed more to the heart, and that, consequently, the catamenia is becoming moderate and normal. After that, the patient should be allowed to sleep for half an hour, and, after a repetition of the suggestion, carefully awakened.

Care must always be taken to adopt the suggestions to the intelligence of the subject, and the effort should always be made to convince the hypnotic of the appearance of the suggested effect in such a manner, as to bring the several steps in logical sequence before his mental vision. Success will be attained, with a little practice, by always arranging a plan of suggestions,beforehand, and acting in accordance with it during hypnosis. Any one present at the sitting should also be instructed beforehand, in order to guard against the effect of the curative or training suggestions being spoiled by injurious countersuggestions, such as—"That is no good," or "He is trying to persuade your disease out of you."

If we now ask, what diseases are adapted for treatment by suggestion, the answer is, that this treatment is in place in all maladies; for some diseases have their origin solely in our morbid imagination, while in every case the *sensation* of disease—the feeling that we are ill—is simply an idea in our brain. By means of hypnotic suggestions, however, we are enabled to remove morbid ideas from the brain of the patient, and replace them by other ideas of an opposite character.

A pain in any part of our body, for instance, has its origin in a stimulus which is communicated to our brain, and thus affects the world of our ideas. Hence arises the idea that there is something out of order in our system, that there exists an injurious or, at any rate, an unpleasant irritation. Now, we cannot certainly in every case remove the cause of

the pain by a countersuggestion, but we can, at any rate, get rid of the pain itself, and thus make the condition of the patient more tolerable.

In thousands of cases, local pains of the most varied character have been removed often permanently in a few minutes. In neuralgia, sciatica, megrim, muscular and articular rheumatism, and in pains arising from wounds, apparently miraculous results can be obtained by hypnotic suggestion.

It has also been found possible to effect the abandonment of bad habits, such as left-handedness, greediness, incontinence of urine, lying, etc., with a few suggestions; to cure dipsomania, and to successfully treat that otherwise incurable complaint, stammering, with other disturbances of the vocal organs arising from some physical irregularity.

Hysteria and neurasthenia require longer treatment, but are generally curable by suggestion, as these cases have their origin, to a great extent, in a morbid state of the imagination (in morbid ideas).

Insomnia in consequence of nervous excitement, anxiety, trouble, or excessive mental application, also various disorders of menstruation (excessive, painful, or irregular catamenia) will rapidly yield to this treatment. In habitual constipation, loss of appetite, and pains in the stomach recourse should be had to hypnotism; it will seldom be found to fail.

Successful results have been obtained in St. Vitus's dance, even in chronic cases, in various forms of paralysis, in convulsions in epileptic disorders, melancholia, etc. Even perverted sexual impulses have frequently been cured; and hypnotism has also already been successfully tried in childbirth, delivery being accomplished painlessly and without unnecessary excitement and anxiety on the part of the mother.

It is hardly necessary to mention that in some of the above diseases hypnotism by itself is not sufficient for a complete and permanent cure; it must be supported by a regular diet and suitable hydropathic treatment. Hypnotic therapeutics by no means exclude these latter measures; it is not an independent method of treatment, but a sovereign and, at the present time, indispensable adjunct in the hands of the physician and Natural Healer.

Much has been said concerning the danger of hypnotism. In order to satisfy the doubts of anxious inquirers, it will be interesting to hear the testimony as to the value and danger of hypnotism of men who are entitled, by their long experience, to form an opinion on the matter.

Dr. *Liebault*, of Nancy, the father of hypnotic therapeutics, writes on December 6th, 1893:—"(1) I protest against the difficulties placed in

the way of the study and practice of the branch of mental science, known by the name of Hypnotism, Psychotherapeutics, etc., by governments acting on the advice of incompetent physicians. (2) Having used the treatment of hypnotic suggestion for many years, I assert that in the cases for which it is adopted, and they are very numerous, it is far superior to treatment with drugs; it does not entail the dangers incident to the latter; for it acts 'cito tuto at jucunde.' I take the field in defence of this system, armed with the results of an experience of thirty-four years, with more than 12,000 patients."

Dr. ***Bernheim***, Professor of Medicine at Nancy, a well-known authority on suggestive therapeutics, says: "On the strength of an experience of more than ten years, with thousands of patients treated with hypnotism, I assert that our method, rightly applied, is often beneficial and never hurtful. The recognized medical profession should neither forbid nor despise the study of suggestion, but should see to it that it be made a compulsory subject of study for future doctors. For, lacking a thorough knowledge of the physical element in disease and its pathological and therapeutical significance, a doctor is not worthy of the name, he is no more than a horse doctor."

Dr. ***Eulenburg***, Professor of Medicine in Berlin, writes: "The danger of hypnotic research, always so anxiously dwelt upon in certain quarters, can only be deemed a frivolous pretext, not a serious reason for restrictive and repressive measures. These dangers have never yet been indicated by any one really acquainted with the subject; they exist only in the imagination of those who desire to use them as a screen to hide their ignorance, prejudice, and incompetence to deal with the matter."

Dr. W. ***Bruegelman***, Paderborn: "The question whether any mischief can result from the employment of hypnotism by competent hands can be answered without hesitation in the negative."

Dr. ***Albert Moll*** in Berlin: "The principal question is, whether injury to health can result from hypnotic suggestion suitably applied, and this question must be decidedly answered in the negative."

Dr. ***Ringner***, Zurich: "I can here only repeat what I have often said, namely, that I have never, in a single instance, known any bad effect to result from hypnotism."

Dr. ***Otto G. Wetterstrand***, Stockholm: "If the question be now asked, whether any danger to life or health can result from hypnotic treatment by a competent operator, the question must be answered in the negative."

Dr. ***A. von Schrenk-Notzing***, Munich: "Hypnotic influence for therapeutical purposes is, when skilfully applied, with due regard to recognized

precautions, in my opinion, perfectly harmless; even if hypnosis has been induced on the same patient hundreds of times for many years"

It will be seen from the above testimonials that the application of hypnotism by doctors and experts is free from any danger. If we occasionally read accounts in the papers of the dangers of hypnotism and of the evil results of its employment, these results may, in some measure, be the work of vicious or unskilful operators, for the most part however, such accounts are mere canards, inventions the origin of which it is impossible to trace.

Laughter Suggested

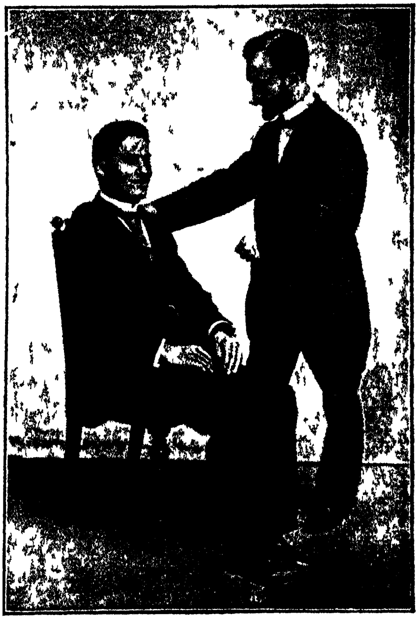


Fig. 212

Hypnosis, The Phenomena of. A proof of the far-reaching effects of suggestion in hypnosis is afforded by the experiments made in clinical hospitals and by hypnotizers to test the reality of the sleep. Anyone watching these experiments for the first time, without any previous acquaintance with hypnotism, will be tempted to believe in magic or in the possession by the hypnotist of supernatural powers. We have seen, however, that every idea implanted in the brain or consciousness strives to transform itself into an action, and this fact gives us the key to the hypnotic phenomena shown in our illustrations.

Just as we can excite laughter in a company by a joke or a comic story, so we can produce the same effect, but with greater certainty, by means of suitable suggestions in hypnosis. Let the subject be told that he is in a merry company, and that a splendid joke has just been made, which he is obliged to laugh at like the rest of the party, his features will be drawn into a smile under the influence of the suggested situation; he will even burst out into a fit of laughter, if the situation should so require, as we very often see in dreamers during natural sleep. Our illustration (Fig. 212) is taken from an instantaneous photograph of a hypnotic, to whom laughter has been suggested. But just as the face in the illustration has assumed an expression in conformity with the suggestion just made,

so it is possible to produce the contrary effect. If the subject be told that he has got a decayed tooth (touching the tooth sharply, will aid the suggestion), the corresponding expression of the face will appear in a few seconds as shown in our illustration (Fig. 213). It is clear that a pain of this kind, produced by simply acting on the imagination of the subject, will vanish at once at a suitable countersuggestion. If the hypnotist tells the subject that an apparition is visible or that angels are coming down from heaven, his face will wear an expression of ecstasy such as we see in pictures of saints (see Fig. 214). Fig. 215 shows the result of a suggestion to pray. Here, however, we will remark that this experiment will only succeed with people possessed of religious faith. An atheist will resist such suggestions even in a deep stage of hypnosis. A very pretty and interesting experiment is shown in Fig. 216. A woman in a deep stage of hypnosis is told to open her eyes and continue to sleep while apparently awake. A bundle of cloth, rolled up, is laid on her arm, with the suggestion that it is a child. She regards it tenderly, fondles and kisses it till she suddenly receives the further suggestion, "But that is not a child, it is a rat." She throws the supposed rat away with a gesture of disgust and repulsion (Fig. 217); it is suggested to her to forget what has happened, and the hypnosis ends. Most astonishing is the exhibition of catalepsy, or hypnotic muscular rigidity, induced by suggestion. Under the influence of suitable suggestions the hypnotic becomes as rigid as a board, the muscles are as hard as stone to the touch, and he can be placed with his head and feet resting on two chairs, as in Fig. 218. Heavy weights can be placed on his body, or a man may stand on it without its giving way, nor does the subject feel the slightest sensation of discomfort



Fig. 213.

(Fig. 219). The most remarkable thing about this experiment is, that catalepsy can be induced in a lighter stage of hypnosis, consciousness and memory remaining intact. A variety of experiments can be made. The subject will eat a raw potato with every sign of pleasure on being told that it is an apple. He will take a glass of cold water, with the idea that it contains hot toddy, will handle the glass as though it were scalding hot, burn his fingers or lips, and finally having emptied the glass, will show all the symptoms of intoxication. If it be now suggested to the same person to write a letter in his intoxicated condition, the result will be a

Heavenly Visions Suggested



Fig. 214.

Prayer Suggested.

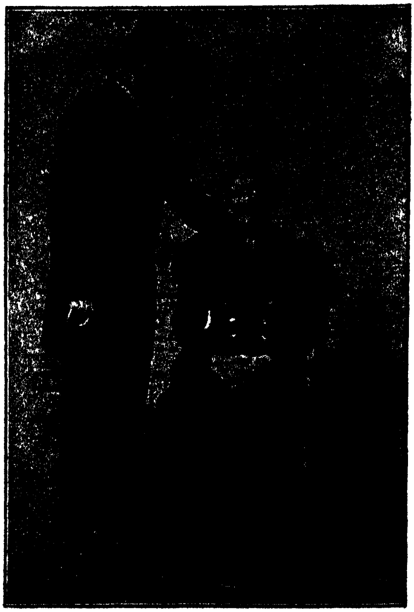


Fig. 215.

scrap of writing similar to that shown in Fig. 220. If the suggestion be made that the hand or arm has become anæsthetic (insensible to pain), the hypnotist will be able to run a needle into the flesh, without the subject's experiencing any pain, the blood will not even flow out of the wound, if a further suggestion to that effect be made. At a time when the physiological processes during hypnosis were still unknown, such experiments were looked upon as pieces of imposture by the medical profession; to-day they are regarded as natural and intelligible, as we can explain the phenomena that occur in them.

Hypnosis During Childbirth. Mr. *Gerling*, a hypnotizer of Berlin, writes: "Hypnotic suggestion, during labor, having been tried in Sweden, France, Italy, and Germany (Munich, Essen) with satisfactory results, I determined to use the method in the approaching confinement of my wife. As it may prove interesting and valuable to those who contemplate using hypnotism in similar cases, I will exactly describe the result.

"On Monday evening my wife complained of pains, resembling labor pain, in her body. As the confinement was daily expected, I gave her the following suggestion on retiring to rest:

Nursing a Child Suggested.



Fig. 216.

" 'You will sleep peacefully and feel well. Should the pains get more severe, and you feel that the time is coming, you will wake and at once wake me.'

"My wife is very suggestible, and hypnosis with her is remarkably deep, especially when induced by passes. About five in the morning my wife roused me, telling me that she was awake and that the labor pains had begun. Her three previous confinements had been normal, but were attended with much pain. I now gave the following suggestion:

"'I will go and fetch the midwife, but cannot be back before twenty minutes. During that time the pains will return at longer intervals, and not be so severe as hitherto. Birth will not take place before my return, you will now awake and feel strong and be in good spirits.'

As soon as she was awake I went to the midwife on my bicycle. She came to my house in a carriage, arriving six or seven minutes after me. I found my wife tolerably well. The suggestion had promptly taken effect.

"It is not a child, but a rat."

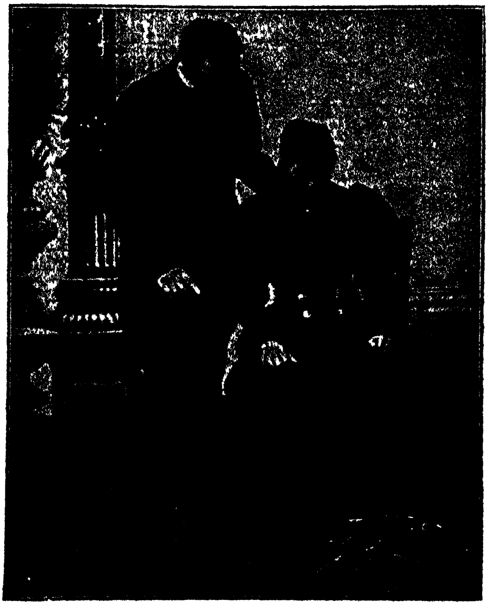


Fig. 217.

"I then put her to sleep again and made the following suggestion: 'As soon as Mrs. *G.* (the midwife) arrives, the labor will re-appear with the same strength as before. There will be pain, but it will be tolerable; it will greatly fatigue, but not weaken you. At the third spasm, which immediately precedes the actual birth, you will go to sleep, and will wake when you hear the first cry of the newborn baby.'

"I gave this suggestion very slowly and urgently, repeating it, as a paroxysm of pain had come on in the meantime. With a final suggestion of strength and courage, I awoke her. At the same moment the midwife appeared. It was now a quarter to six (at six o'clock the delivery was completed, the suggestion had taken effect in an ideal manner), when the

patient suddenly closed her eyes and ceased to groan. The midwife asked in astonishment: 'What is the matter with your wife? Has she perhaps fainted?' Before I had time to satisfy her, the head of the child came through with a violent spasm; the trunk followed with a second shorter and less severe spasm: a cry was heard, and the patient awoke with a loud and hearty laugh. The midwife's face, at this moment, was worth photographing. The good woman declined all responsibility when she learned what had happened. When questioned as to the reason for her laughter, my wife was unable to give any. She must have been dreaming, she

Catalepsy suggested.



Fig. 218.

answered, but she could not be certain. As ten minutes passed without the appearance of the after-birth, I gave a suitable suggestion, and two minutes afterwards the after-birth was expelled with a slight spasm.

"After the midwife had proceeded with her duties for a time, my wife complained of troublesome after-pains. She was sent to sleep, and the following suggestion was made:

"'As soon as the child has been bathed and shown to you, you will go to sleep content, and sleep peacefully for three hours. The after-pains will follow their normal course, but will not disturb your rest in any way. In three hours you will awake, and feel very well, though somewhat tired. You will not be obliged to make any movement. You are only to move your

arms and your head; you will have a heavy feeling in your legs, which, however, will not be troublesome to you. You will not move your legs or abdomen, and will not be able to do so until three o'clock this afternoon. Then the feeling of weight will disappear and you will go to sleep again'

"The object of these suggestions was to prevent unnecessary movements on the part of the naturally active patient, as these would tend to retard her recovery This object was completely gained At three in the afternoon she was sent to sleep, and the following suggestion was made:

"'To-day and to-morrow you will sleep continuously when you are alone You will talk very little When awake you will feel well and be in

The highest form of Catalepsy suggested.



Fig 219

good spirits. I am now massaging your relaxed breasts (this was done), they will be strengthened in this way, and milk will be formed in them.'

"My wife had hitherto never been able to suckle her children, and I hoped to make this possible by suggestion. As a fact, the milk appeared copiously on the following day, so that the child could be put to the breast, and further suggestions not only promoted the supply of milk, but had such a beneficial effect on my wife's condition, that in a week she was able to leave her bed. I, however, discontinued the suggestions for the supply of milk on the sixth day after birth, as daily examination showed that the

milk deteriorated in quality, and often caused sickness in the child. I noticed that, with a suitable diet, there was always a plentiful supply of milk in the morning, and which was retained by the child; this, however, was not the case during the day and in the evening. I was unable to decide whether the cause of the deterioration in the milk was to be sought

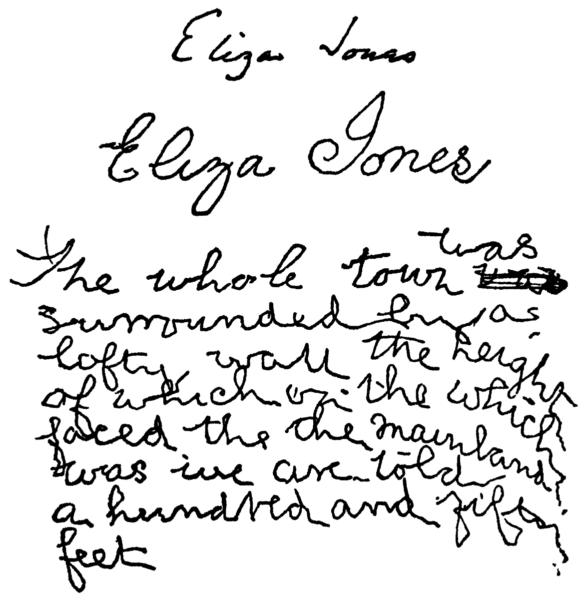


Fig. 229.

for in the constitution of the mother, or in the too rapid formation of milk under the influence of suggestion, nor whether her restlessness had anything to do with it. I discontinued the suggestions, supplied the deficiency of natural with prepared milk, and the mother and child are well."

HYPNOTISM (THE HYPNOTIZED GIRL IN BUDAPEST).

By James Groll. Taken from "The New Science of Healing."

The editor of this journal has on several occasions instituted a searching inquiry into various sensational reports, published in the papers, of crimes committed by means of hypnosis, and of injuries resulting from it, and has succeeded in branding these accounts as pure inventions. The results of his investigations were always forwarded to the papers in question, including several of the most influential daily journals, with the request that they might be published in correction of the original reports,

but this request was seldom acceded to. Naturally, the busy editor of a daily paper is not in a position to test the accuracy of every report sent to him, nevertheless, for the sake of his readers, the results of a carefully instituted inquiry should not be kept from them, unless he renounces the claim to write in the interests of truth, and prefers to labor in the service of public sensation.

The case, alluded to above, was originally reported as follows:

"A young girl in Budapest has been suddenly seized with the delusion that she is Trilby. *Risa Farkas*—that is her name—is the daughter of a real estate agent; she is in her sixteenth year. The parents of the girl, who possesses considerable personal attractions and a lively disposition and appeared to be in robust health, had for several weeks sent her to a high-class school of sewing. One day, on her way to school, she chanced to make the acquaintance of a young medical student, who accompanied her to her home twice a day. About four weeks ago the young man persuaded the girl to go with him to an afternoon performance at the theatre. On this occasion 'Trilby' was given. On the following day she left off going to the sewing school, and went to a hospital instead, where she applied for medical assistance for a nervous affection, which she had never mentioned before. When her parents discovered that she had left off regularly attending the school, they kept her shut up in the house, and forced from her a confession of her visits to the hospital.

"That was exactly a fortnight ago. Since that day the girl's mind has been shrouded in darkness. All the morning and afternoon she goes about the house barefooted, like Trilby in the play; sometimes she asks her father for flowers which she kisses and destroys; at other times for red slippers, four-leaved clover, or other extravagant things. At intervals she will sing the melancholy song "Au clair de la lune" from Trilby, with a fixed gaze and abstracted manner. Medical assistance was, of course, summoned, and both her doctors, Dr. *Karl Schaffer* and Dr. *Alexander Horvath*, unanimously declared that the girl had been hypnotized. In a hypnotic trance she relates everything that has been told her by the doctors in the hospital during her visits; in so doing she uses medical terms, and many Latin words which she had never heard before; and the doctor, attending her, has, from the girl's own words, arranged a plan of treatment for her. She refuses to tell the young medical student's name."

The "Vossische Zeitung," the "Berliner Lokalanzeiger," and other papers having repeated this romance, which to any one acquainted with hypnotism bears the stamp of falsehood on it, in greater detail, I applied to the young lady's family as well as to the doctors who had attended her, and was able to establish the fact, that there had been no question of hypnotism

in the matter; that Miss *Risa Farkas* had for a long time suffered from anæmia; and that in consequence of the gossip of some of her acquaintances the story got to the ears of some enterprising Budapest reporter who at once constructed a "sensational romance" on this slender basis of fact, and that hypnotism had been dragged in to supply the sensational element, nothing better offering for the purpose.

The parents of the girl were not a little astonished to read the accounts published in the papers. What the doctors, who have been mentioned, and who, according to the story, "unanimously declared that the girl had been hypnotized," thought of the matter, will be seen from the following letters addressed to me by Drs. *Schaffer* and *Horvath*:—

"Budapest, 7./2., '98.

"Sir:—

"In reply to your letter, in which you ask for the truth concerning the case of *Risa Farkas*, I can give you the following information:

"About two weeks ago I was sent for by the doctor who was treating the case for a consultation; from the description of her symptoms I ascertained that a change had been noticed in the patient's manner a few days previously; that she frequently muttered to herself, uttering words like "I must go to a doctor," etc.; that she suffered from complete loss of sleep, and refused to take any nourishment. In conversation with her I noticed a pronounced anæmia; she would not consent to a thorough bodily examination. Her mental symptoms were as follows: She had an abstracted look about her eyes; her facial expression betrayed intermittent attention, which was apparently occupied with hallucinatory impressions. Questions were unnoticed; if they were repeated loudly and distinctly, they were answered in an inadequate manner. Her mind wandered at times, and she behaved as if in delirium; of the words she uttered while in that state I have no more recollection.

"Nothing was said during the consultation about hypnotism, suggestions, Trilby, or such things. I diagnosed the case as one of mental derangement arising most probably from anæmia and hysteria. This is the true account; everything else is more or less the product of an excited imagination.

"(Signed) Dr. *Schaffer*."

"Budapest, 22./2., '98.

"Sir:—

"Your letter reached me some days late in consequence of the address being incorrect; I consider it my duty to inform you that the accounts in the Berlin papers are founded on false reports.

My patient, Miss *Risa Farkas*, has neither become insane, nor has she been the victim of an experiment in hypnotism. Her's is a case of hysteria, with the addition of an attack of mania, lasting for several days. You will not consider it necessary for me to indicate the various symptoms of this disease; I will only mention that I am treating my patient on the principles of suggestive therapeutics, and that my efforts have been crowned with the greatest success. Miss *Risa Farkas* has now so far recovered that she is able to resume her work.

"(Signed) Dr. *A. Horvath.*"

This is plain and instructive. Our readers are aware that the reports —in the papers—of the dangerous results of hypnotism are nothing but canards; it is highly desirable that this conviction should also find an entry into the minds of newspaper editors, and lead them to recognize that it is not right to alarm the public by articles, which are certainly sensational reading, but which do harm to a good cause, and, at the same time, to patients who might, perhaps, be benefited by suggestion, but are deterred from trying it by such communications.

HYPOCHONDRIASIS is an obstinate and intractable disease, occurring principally among the well-to-do classes, and one to which the male sex is more particularly liable; it occurs generally between the ages of twenty to forty, frequently also attacking older unmarried men. The condition, indicated by the term, forms a sort of connecting link between nervousness and actual mental disease.

SYMPTOMS.—Patients afflicted with this disorder are morbidly observant of the most insignificant phenomena in their bodily organism, and any unusual symptom, even of the most trifling nature, is regarded by them as a menace to their life. They are thus in a constant state of worry and anxiety about their health.

In a more advanced stage of the disease, the patient displays an abnormal absence of courage, and great mental instability and excitability; he is suspicious of everybody, becomes incapable of attending to his affairs, silent, melancholy, and fond of solitude; he also develops a tendency to sleep (unless subject to insomnia), from which he is awakened by unpleasant dreams. Further symptoms are:—Dull pains in the head; dry tongue; bad taste in the mouth, especially on waking in the morning; perspiration after the slightest movement and exertion; a feeling of pressure, oppression, and tightness over the ribs; copious evacuations of gases; pains in various parts; debility; obstinate constipation, accompanied frequently by blind or bleeding piles.

These troubles increase from time to time, and often culminate in dreadful attacks, during which the patient is seized with severe depression, restlessness, and anxiety; his heart palpitates or beats violently, as though he had committed some crime. He also suffers from tightness in the throat, difficulty in breathing, sickness (in which a sour, viscous substance is often vomited), heat and throbbing in the abdomen, cold sweats, twitching of the muscles, pains in the back, inclination to shed tears, giddiness, fainting, etc. These are the usual phenomena accompanying an attack. After the patient has had many of these attacks, his face acquires a peculiarly distorted expression, together with a pale, earthy complexion; his thoughts are concentrated on his condition; he feels his pulse; and many examine their tongues and even their stools.

These symptoms, however, are subject to numerous variations.

CAUSES.—Inherited disposition; absence of physical and mental occupation; digestive disturbances, arising from long-continued faulty diet and mode of living, and especially from indulgence in rich, indigestible food. Also constantly associating with hypochondriasis, long illness during which the patient acquires the habit of self-observation, neglected or badly treated cutaneous eruptions, intermittent fever, dysentery, etc. Excessive indulgence in medicine, medicinal poisoning, spirituous liquors, a sedentary mode of life, celibacy, dissipated habits, masturbation, impotence, long continued emotions. A further cause may be sought for in chronic abdominal disorder, chronic gastric and abdominal catarrh; congestions, obstructions in the cystic vein owing to disease of the liver, piles, weakness, etc.

TREATMENT.—The most certain and in most cases indispensable treatment for the cure of hypochondriasis is the strengthening or regenerative treatment (combined in some cases with the Kneipp Cure), which must be persevered in for several months. The patient must spend as much time as possible in the open air, especially in mountains or forests, and must have abundant occupation both for mind and body. The treatment must be particularly directed towards the removal of the causes of the disease, and for the fortifying of the constitution curative gymnastics, adapted to the patient's strength, can be recommended.

If the means of the patient do not allow of his following a suitable course of treatment at a Sanatorium, or if he has no opportunity of undergoing the strengthening treatment at his own home (so far as this is practicable) under the direction of a natural healer, he must endeavor to prevent the further progress of the malady and to remove the causes as far as possible.

He must, in the first place, take up some occupation affording scope for the exercise of his mental as well as his bodily powers, some healthy

physical and mental work, passing as much of his time as possible in the open air, in a cheerful situation and in a cheerful society, and take plenty of outdoor exercise, such as mountain climbing, etc., in short, fresh air, occupation in the country if possible, and open windows at night are the principal points to be attended to. He should observe a non-stimulating, or, if it agrees with him better, a mixed diet; the practice of curative gymnastics in the open air, or in a room with open windows, is also most beneficial in such cases. Care should also be given to the regular action of the bowels; in case of constipation, see "ENEMATA" and "CONSTIPATION."

It is also good for the patient to exchange his home and his customary surroundings for a new neighborhood for some months, selecting a residence in a healthy climate, with a pleasant situation and agreeable society. Suitable physical and mental work is an essential feature of the treatment, as mentioned above.

Benefit will also be derived from cool and cold baths of short duration, especially river baths (one to three minutes at most), followed by active exercise, also from affusions and packs.

Curative Gymnastics: two out of the twelve groups daily, in order, combined with frequent and gentle massage of the abdomen and the whole body. See also "HYPOCHONDRIASIS" under Kneipp Cure. For further information about Curative Gymnastics and Massage, also for Modes of Application, see Index. See also the treatment given in the article on "PILES."

CURE OF A CASE OF HYPOCHONDRIASIS.

By EDMUND SCHNECKENBERG.

No complaint embitters life to such an extent as hypochondriasis, or disorder of the abdominal nerves. Almost every person suffering from illness indulges in the hope of recovery, the hypochondriac alone is without hope. He lives to be a torment to himself and to others, and, if occasionally an improvement in his condition is visible, some symptom or other presently makes its appearance which brings his disease again under his notice, causing him to regard himself as the most miserable of all men. So long as the hypochondriac has a healthy appearance, he is considered a humbug, who is only shamming illness, and nobody believes in the reality of his disease until he looks pale and ill. The treatment of hypochondriasis is no easy matter. Suitable exercise and repose, light and digestible food, mild water treatment, good air and certain physical influences are indispensable for the amelioration of the patient's condition, if not for his complete recovery.

A gentleman, formerly an enthusiastic sportsman, swimmer and skater, was compelled by the nature of his occupation to relinquish his active habits. General indisposition and loss of appetite set in; loss of flesh and various nervous troubles supervened, and the patient, formerly a cheerful and lively man, became morose and nervous and a source of annoyance to his family on account of his continual querulousness. Scores of times during the day he would complain of some fresh symptom, magnified by his imagination till it seemed to him intolerable. At one moment his heart would palpitate, at another he would feel a burning pain in his head, or a twinge in his knee, a quarter of an hour later he would complain of feeling a distension in his stomach, then he would feel giddy, and so on from morning till night. A course of natural treatment in a mountainous district, consisting of uninterrupted exposure to fresh air, vegetable diet, treatment of the skin (full baths of rather high temperature were given at the commencement, replaced afterward by shallow baths, together with compresses on the abdomen during the day, retained till warm, and cool enemata after stool; abdominal packs, three-quarter packs and massage being added as the patient's strength increased), strictly regulated exercise and rest, and healthy mental influences, completely restored the hypochondriac to health, which he has enjoyed for three years.

A CASE OF HYPOCHONDRIASIS CURED.

By Ferd. Liskow, Sommerstein Sanatorium.

On the afternoon of the 2d day of April a shy, timid man, with a shuffling gait, and who appeared to have a bad conscience, appeared in my Sanatorium. It was evident at the first glance that he was a physical and mental wreck. He gave the impression that he had no more interest in life and had entirely given up hope. As he afterward informed me, this was really the case. A visit to a Sanatorium for the Natural Method of Healing was his last hope. If that failed to restore him to health, he had resolved to shoot himself, as his life was a burden to him. He had contemplated marriage, but had refrained from taking that step owing to weakness and impotence. He was the typical picture of a hypochondriac. He had corresponded with me from his residence in Lodz, in Poland, but, with the suspicion peculiar to men in his condition, he had not been able to bring himself to mention his name to me for fear of the nature of his complaint getting known. He therefore always used an assumed name. Only in his last letter had he gained sufficient confidence in me to sign his name.

His disease had commenced in his youth. Self-abuse was the foundation of his troubles, which were subsequently intensified by sexual excesses and their consequences. When he came to me he looked, in spite of his comparative youth,—he was only twenty-nine years old—like a decrepit and worn-out man. Every little thing worried him, and he had become a confirmed misanthrope. During the first three weeks of his treatment he kept himself entirely aloof from the other patients, he wandered about the woods near the Sanatorium by himself, spoke only to me, and no more than was absolutely necessary. Not till the fourth week did he begin to wake up. Then his good spirits revived again. From that time his progress made gigantic strides. In a few weeks he had got over his unsociability and began to play and sing. He soon entertained the whole company. After seven weeks' treatment (a combined regenerative course) he left my establishment completely restored and happy. A short time afterwards he wrote: "I have never during my whole life felt so well and happy as I do now."

Note by the Author:

Although we have no personal knowledge of the patient, we have good grounds for believing, from *Kuhne's* point of view (see *Kuhne's* cure), that the overloading of the abdominal organs with foreign substances and the waste products of assimilation was the root of the mischief. The prostrate gland, seminal ducts and urinary organs, and the sexual parts in general were congested with blood, thus giving rise to a constant irritation of the genital organs, and acting as a provocative to self-abuse and to subsequent sexual excesses. The general debility and impotence (probably merely physical) were again the result, not so much of the drain on the constitution consequent on excesses, as of the congestion of the abdominal organs. The natural method of healing in the form of the so-called regenerative treatment, endeavors to attack the root of the disorder, and to remove its fundamental causes. It has achieved another brilliant success in this case, in the credit for which the healer, by his careful and individualizing treatment can claim his full share.

HYSTERIA (from the Greek hysteria—the womb) is one of the diseases incident to the female sex most commonly met with. This disease, from the variety of its forms, its rapid changes, the scarcity of characteristic symptoms, the uncertainty of its course and the fact that its attacks arise and disappear often without any assignable or from some apparently insignificant cause, bears a close resemblance to hypochondriasis. People are therefore sometimes tempted to consider both diseases as identical, and it has been asserted that the difference between the two arises merely

from the difference of the sexes, and that the hypochondriasis of the male is the hysteria of the female, and *vice versa*. This, however, is not the case.

The abdominal organs are not so distinctly the seat of the disorder in hysteria as in hypochondriasis. Hysteria is to a much greater extent conditioned by a general faulty, highly strung, over-sensitive nervous organization, frequently displaying itself, it is true, in the abdominal nerves, but accompanied in this case generally by an increased irritability, much less conspicuous in hypochondriasis. For this reason attacks of indigestion are not so frequently met with in hysteria; convulsive attacks, on the other hand, are very common, occurring more often without any previous warning and more generally increasing in intensity.

"Nervous Weakness" is, therefore, the best term for hysteria, and in the treatment of this disease far more importance has to be attached to strengthening the entire nervous system, and counteracting its excessive susceptibility than to the direct treatment of the abdominal organs as in hypochondriasis.

In hysteria we do not meet with that peculiar mental disposition, that exacted imagination, in consequence of which the patient's thoughts are constantly occupied with and magnify his bodily troubles, which is the characteristic feature of hypochondriasis. It is true that in hysteria much anxiety is displayed together with considerable mental disturbance, but the morbid ideas arising in the mind of the patient are not so specially directed to her bodily condition, for the attacks are frequently succeeded by complete and even exaggerated cheerfulness, with entire absence of anxiety about her health, which is never the case in hypochondriasis. The sufferings of a hysterical subject are rather physical than mental; she is apt to be confidential and communicative, and bewails her lot for the purpose of making herself interesting to those around her; the troubles of the hypochondriac, on the other hand, are mainly mental; he contemplates the future with dread, displays suspicion, and complains with bitterness of his sufferings.

In hysteria the sexual organs are always specially implicated, a disturbed condition of their functions being very frequently the primary cause of the disease, which is never in such a marked degree the case in hypochondriasis. The reason of this is to be sought for in the peculiarity of the female constitution, whereby the organism as a whole stands in intimate connection with the sexual system and especially with the womb, so that any disturbance in the one reacts directly on the other. In man, on the other hand, the sexual apparatus forms to a much greater extent a separate, independent entirety, exerting comparatively little influence

on the physiological or pathological condition of the remainder of the organism (physiological from physiology, *i. e.*, the science of the constitution and functions of living beings, *pathology*, the science of disease). This difference is very important and has to be constantly kept in view in the treatment; for the various sexual functions and metamorphoses (transformations)—the advent of puberty, menstruation, pregnancy, parturition and lactation exert a decided influence on hysteria, often standing to it, as we have said, in the relationship of cause to effect, and also playing an important part in its cure.

It is at the same time true that the two diseases have much in common in regard to their essential features, cause and treatment, often occurring simultaneously and passing off into each other. The merely nervous physical, or as it is sometimes called—dynamic hypochondriasis, especially bears a close resemblance to hysteria in its symptoms. Women, moreover, are liable to morbid conditions more resembling hypochondriasis, and symptoms closely akin to those of hysteria frequently occur in men. As hysteria is, if possible, even more varied in its forms than hypochondriasis, a description of its symptoms is almost an impossibility. Only those who have often had occasion to observe hysterical patients during their attacks can form an idea of the variety of the symptoms and the frequency of their changes. We may almost say that the peculiar characteristic of hysteria is that it has nothing characteristic about it.

In attempting, therefore, to describe the disease, we can do little more than give some general outlines, as the symptoms are subject to endless modifications.

Symptoms.—The appetite is irregular, though not seriously impaired, coming on suddenly and at unusual times. A feeling of pressure and discomfort experienced after eating, causing the patient to desire to get rid of the food. She is subject to a feeling of sickness, to gastric cramps, actual vomiting, acid eructations, and a bitter taste in the mouth. She suffers much from wind in the stomach, the removal of which is only effected with considerable difficulty. Rumbling noises are heard at times in the stomach, which is apt to be distended and swollen. At the same time a peculiar sensation is experienced, as if a ball were rolling about in the abdomen, gradually ascending to the stomach and throat, and giving rise to a dread of suffocation. Hysterical patients also suffer greatly from violent pains in the bowels, commonly known as windy colic. The action of the bowels is always irregular, the patient suffers from constipation, and still more frequently from diarrhœa. The stools often have an offensive odor, and a green or slimy appearance, due to

an altered condition of the bile and other fluids secreted in the intestinal canal.

The skin is generally dry and perspiration can only be induced with difficulty. The urine is sometimes diminished in quantity, sometimes suppressed altogether, the latter symptom being often accompanied by an unpleasant urgent desire to pass water. At other times, again, a large quantity of urine may be passed, the latter having a pale watery color previous to an attack, and a pale color after it. The secretion of saliva is almost always increased in quantities in the mouth, and is sometimes so acid as to cause inflammation. Cramp in the stomach is a frequent symptom. Sometimes the sexual parts secrete a slimy fluid, either during the attacks or at other times. No secretion, however, is so perceptibly increased as that from the lachrymal glands. Copious floods of tears are frequently shed, causing inflammation of the eyelids. They are excited in large quantities by the slightest mental depression. Sometimes the patient will weep copiously without any occasion whatever. Hysterical subjects sometimes look pale and ill; at times, however, they present the appearance of perfect health. Their facial expression, however, is always subject to rapid changes. Within the space of an hour it may vary from that of perfect health and cheerfulness to that of melancholy and dejection with dark rings around the eyes. The bodily heat is at the same time nearly always unevenly distributed. Some parts are very hot, even burning and red, others pale and cold as ice. The lower extremities particularly are generally strikingly cold, a large supply of heat being required to warm them.

The pulse is always irregular, hard and accelerated; during an attack, however, it is retarded, intermittent, and at times scarcely perceptible. The heart beats violently perceptible and even audibly. Breathing is almost always labored, causing the patient to sigh frequently, and accompanied by a dry spasmodic cough. Actual asthma often supervenes, combined with a feeling of great anxiety as if the cavity of the chest were not large enough to admit of the expansion of the lungs. The circulation is always uneven; sometimes accelerated, sometimes retarded.

The voluntary muscles are subject to many various kinds of spasms. Spasms in the muscles of the face, throat, head, larynx and œsophagus. give rise to grinding of the teeth, immoderate screaming and shouting, loud laughter and weeping without any external cause, and rapidly alternating, sobbing, yawning, short intermittent breathing, highly sensitive, spasmodic constriction of the throat, etc.

Frequently, especially during the night-time, the patient is unable to keep her limbs quiet, the arms, legs, and even the head being in constant motion.

The eyesight is sometimes diminished, sometimes heightened in power or altered in a peculiar manner. A singing, ringing or roaring is heard in the ears, and a moderately loud noise, especially if unexpected, produces intense discomfort causing a violent shock or even convulsions. The senses of smell and taste are usually morbidly intensified. All powerful odors, especially those of a pleasant nature, are disagreeable to those suffering from hysteria. Everything has an insipid, bitter, salt, sweetish or strong taste.

Hysterical patients are excessively sensitive to changes of temperature, the slightest alteration making them feel too cold or hot. They often complain of cold, when their bodies are warm to the touch and *vice versa*, the temperature of their bodies appearing to them quite different from what it really is; the most varied feelings of pain and discomfort arise as suddenly as they disappear. Megrim is commonly met with in hysterical patients.

The changes in the sexual system, as well as those in the patient's mood and mental life are legion. It is impossible to describe these exhaustively.

The sexual impulse is seldom diminished; on the contrary, it is very often largely increased. Hysterical women, therefore, frequently acquire the habit of self-abuse, dwell upon erotic fancies, are fond of indecent or exciting literature, do all they can to make themselves pleasing to men, and yield without resistance to their importunities.

The progress of the disease is very uncertain; but it has a marked tendency to become chronic. Children are never subject to the malady.

When it occurs at the commencement of puberty, it often disappears with marriage, pregnancy and parturition; sometimes, however, these latter may give rise to the disease, especially when deliveries succeed each other rapidly.

In the so-called "change of life" the disease nearly always disappears or takes another form.

CAUSES.—Hysteria can arise from various causes. It can generally be traced to disturbances in the abdominal functions, degeneration of certain abdominal organs, obstructions in the digestive apparatus, female disorders, etc. These in their turn lead to faulty distribution and composition of the blood, attended by weakness of the abdominal nerves and general nervous debility.

TREATMENT.—Same as in "CHLOROSIS." Great perseverance and patience, however, must be exercised in long-standing and obstinate cases. If the disease be the result of other morbid conditions, these latter must

of course receive proper attention and treatment. Massage of the abdomen and of the body generally can be recommended in many cases. Many patients again are benefited by a thorough-going Kneipp treatment. (See article, "HYSTERIA," under Kneipp cure.) As the principal remedy, recourse should be had to curative or animal magnetism, which can boast of most startling success in the treatment of hysteria, for which it appears to be specially adapted.

Curative Gymnastics; particularly Groups II., III., VI. and VII. See also "CURATIVE GYMNASTICS," "MASSAGE" and "KNEIPP CURE." For Modes of Application, see Index.

CURE OF HYSTERICAL CONVULSIONS AND SEVERE FEMALE DISORDERS IN BILZ' SANATORIUM.

Miss *S.*, of N., was a complete wreck, with worn-out, lifeless expression of countenance, incapable of sitting upright. She was lying down in her carriage when she was brought to the establishment, and great care had to be taken in carrying her to her room. When changing her bed she had to be carefully lifted by two persons. If I had seen the patient's condition when she first applied for admission into the sanatorium, I should have declined to receive her, for her state was such that all the patients who saw her declared a speedy death to be inevitable, as she was incapable of undergoing any treatment. The diagnosis revealed severe abdominal disease, combined with hysterical convulsions. The patient had to bear the most terrible sufferings, for weeks she was without sleep, she was subject to convulsions, lasting for hours at a time, and to intermittent pains of such violence that she screamed at the top of her voice; she herself, as well as the other patients, looked forward to death to release her from her sufferings. A very mild course of treatment was resorted to and carried out. It consisted of mild ablutions, gentle massage, lukewarm hip-bath, and derivative packs. The worst feature of the case was that a complete cure was impossible without a surgical operation, which was performed as soon as the patient was strong enough to undergo it. Afterward she was treated on the principles of the natural method of healing combined with careful nursing. The treatment was attended with incredible difficulty. Gradually her condition improved, she was soon able to get out of her bed, and shortly afterward to go out of her room by herself. In four months she could walk about the grounds like other patients, and climb up into the lofty tower. Two months later all traces of pain and weakness had vanished and the patient could be discharged as cured. Those who had seen her brought into the establishment looked upon her cure as nothing short of a miracle.

CURE OF HYSTERIA.

Miss *M.*, thirty-two years of age, had had an attack of gastric fever six years previously. Erroneous treatment with medicine had produced a condition of nervous disorder which extended over her whole body, and finally culminated in a severe form of hysteria. The disease showed itself more especially in great depression, insomnia, constant feeling of pressure on the brain, megrims, nervousness, catarrh, gastric disturbances and convulsions. She had consulted various physicians without result. In despair she had resolved to yield to her fate, when she heard of the successful cures performed in my sanatorium, and determined to come there. After a course of seven weeks, she had recovered, nothing being left of her disease except a slight nervous irritability and weakness. She left the sanatorium in good health and spirits. Three months later her nervousness had also quite disappeared as the result of a careful mode of life.

Ferd. Liskow.

I.

ICE AND ICE-BAGS should never be applied, nor should pieces of ice ever be swallowed, though often prescribed by doctors of the present day, because ice irritates too greatly and produces a state of congestion and metastasis (which see), or may bring about inflammation of the lungs, peritonitis, etc. With cold, cool or soothing compresses, or cold local baths (*e. g.* in bruises), which must be renewed as often as required, the desired result is attained much better and with less danger. Moreover they are easily borne in all cases, and have not the injurious irritating effect which ice has.

ICHTHYOSIS is a skin disease frequently inherited from the parents, and which then manifests itself soon after birth in the form of a rough dark skin. The peculiar scale-like rash then appears gradually in a more or less pronounced form. The scaly rash may, however, have a different origin, and appear later, in which case it shows itself more particularly on the arms and legs (knees and elbows).

Treatment.—Non-stimulating diet, plenty of fresh air, great attention to cutaneous action and frequent stimulating three-quarter or full packs, followed by bath; bath or wet rubbing of the whole body, sponge down, and bath as directed in article on "Acme" and Kneipp douches.

Full steam-baths, air and sun-baths and trunk-baths are to be recommended.

If the head is especially attacked, then head steam-baths, followed by cool head bath and head pack at night. A thorough course of regenerative treatment will affect a cure most speedily; specially obstinate places should be exposed by means of a burning-glass, to the concentrated rays of the sun until slight blisters are formed. For Modes of Application, see Index.

KNEIPP CURE.—Hay flower shirt twice a week and two douches daily. The various kinds of douches should be applied alternately.

Idiocy, see Index.

Illustrations, List of, see end of book.

IMPETIGO is the name of an eruption in which the pustules are filled with pus and on which scabs form when this has been discharged.

TREATMENT as in "ECZEMA" and "PSORIASIS."

Impetigo, see "FAVUS" and "REPORT OF CURE" under "DIPHTHERIA."

Imposthume, see "CARBUNCLE."

IMPOTENCE (male) is that morbid condition of males, in which they are, during the years of puberty, altogether or partly incapable of having sexual connection, either through the penis not acquiring the necessary degree of erection, or, if erection does take place, through the discharge of the semen occurring before the act of copulation, a condition expressed by the term of "Irritable weakness."

Impotence may arise from various causes. Its most frequent source is over-stimulation and exhaustion by means of self-abuse (see ibid). Next, from exhaustion through excess of sexual intercourse, severe diseases, especially those of the spine, bodily or mental over-exertion, worry, grief, and such like causes.

TREATMENT.—Avoid the cause. If self-abuse is the cause, then, in the first place, shun entirely this detestable vice, moreover very strict moderation in—or better, entire abstinence from sexual connection for a length of time; take plenty of fresh air, sleep with the window open; daily wet rubbing of the whole body, as well as hip-bath (72° to 77°) twice a day, lasting from twelve to fifteen minutes; and steam-bath in bed (duration one hour) twice a week, followed by a lukewarm bath (88°); as much as possible vegetarian diet. Above everything avoid spirits, spices, and other irritants. In general a strengthening treatment should be adopted, as well as gymnastics and massage.

In addition to the above mentioned causes of impotence, congenial defects and imperfections,—such as malformation of the penis, the absence of testicles, etc., should also be mentioned as causing impotence. For further information on "MASSAGE," "CURATIVE GYMNASTICS" and Modes of Application, see Index.

We would call attention to a pamphlet by *Paul Gessen*, entitled "Mechanica Sexualis" in connection with which Professor *R. v. Kraft*, of Vienna, declared on oath in a court of law: *"Paul Gessen's* erector is the best remedy known for impotence." Pamphlet and apparatus may be ordered of *Paul Gessen*, engineer, Cologne on the Rhine.

Impregnation, see Index.

Incandescent Carriage Warmer, see "FOOT WARMER" (CARRIAGE).

Incandescent Flat Iron, see "FLAT IRONS."

Incandescent Foot Warmer, see "FOOT WARMER."

Incandescent Roaster, see "STOVES."

Incandescent Stove, see "STOVES."

Incised Wounds, see "WOUNDS."

Indian-Corn Cake, see "DIET."

Indian-Corn Pudding, see "DIET."

Indigestibility, see "STOMACH, DISEASES OF THE."

Indisposition, see "FALLING ILL," "BAD HEALTH" and "CHILDREN, DISEASES OF."

Indisposition of Children, see "INFANTILE DISEASES."

INDIVIDUALISATION means that in the treatment of a disease, the physician must take into consideration the peculiarities, the bodily strength and condition of the patient, so as to adapt his method of cure, and in particular the diet, to the circumstances of the case.

INDIVIDUAL TREATMENT.

(From Dr. STEINBACHERS' book, "The Natural Method of Cure.")

The past master of naturalists, *Alex. von Humboldt*, enunciated this axiom founded on his vast experience, an axiom of the weightiest importance, and true for all time, so long as the sun shall shine upon us: "There is no such thing as genus, or species, in the whole realm of nature; there are only individuals."

Nowhere in nature is there a gap—all is transition; everywhere the most subtle shades; every individual is different. How difficult it is even to determine the transition from the vegetable to the animal kingdom! Many an inquirer has failed in this initial task. But if whole realms of nature exist beside each other in such delicate gradations, that it is difficult or impossible to determine the boundaries between them, what a fruitless undertaking it would be to attempt to bring all individuals into one category! In nature, in the organism of the human race, nothing is general, but everything is individual—each one differing from another, each endowed with a mind and temperament, with strength and weakness of his own—because each has his own flesh and blood, his own marrow and bone, his own heart and brain. There is an intimate reciprocal relation between all the different products of nature—one requires the other; as it is in microcosm, so it is in our organism—a reciprocal relation between plant and animal, between air and water, between earth and heaven.

We need the plants, to keep the breathing process in order; they absorb, in the light, the carbonic acid which we exhale, requiring it for their food, for their organic structure, and renewed vital force. We draw nutriment from them, and maintain motion by means of their material.

The marrow of our bones, the bones of our skeleton, the phosphorus and the fatty substance of our brain, the iron of our blood, etc.—we have borrowed from the plants, which, in their turn, derived the materials from the soil.

This grand circulation; this interchange of material, by reason of which, after some years, we are no longer the same as we were in childhood—as we stand before the bier with different hair, different nails and toes, different heart, different kidneys, from what we had in our cradle—this mutual relationship it is that makes us wonder at the great machinery of creation, and gives us—with material for thought—a mind to perceive, a soul to feel, and enthusiasm to admire.

Moleschott says rightly: To acknowledge this mutual dependence, and to harbor joyfully and reverentially the feeling that we are connected with the great whole, constitutes true piety.

We all depend upon each other; but all again on the air surrounding us, on the plants, the animals, the water springs, and the soil; and yet each individual is different, an individual in himself participating in the great universe as a link of the whole chain, and performing his humble part in the mighty circle of life and nature.

Just as differences of station and occupation, of climate and constitution, of temperament and grades of education produce different bodily conditions, so do also people vary from each other, yet always under the shield

of the one fundamental principle—the blood is the life; without blood there can be no strength. Viewed from this point, there is but one living being—for the life of all is based on matter and force. But just because the many various organs—which constitute one separate whole, called an individual—are so easily subject to modification by the above-named influences, *i. e.*, food, warmth, air; and since they are at different stages of development; activity, change, and dissolution are, in fact, going through different vital processes—for that reason every individual is a separate unit.

The parts of the one great whole are, therefore, manifold—here a sensitive subject, there an apathetic one; here a lymphatic subject, there a choleric one; here rapid change, there more gradual change; here movement, there a constant state of rest; here the blood courses impetuously through the veins, there it pulsates weakly and slowly; here there is great absorption and little waste, there great loss and little recuperation; therefore, there are the strong and the weak—here a broad course of health which can hardly be overstepped, there only a small and narrow path, in which the vitality is cramped, and only too easily gets off the track. There can be, therefore, no dogmatic scheme of nourishment; not any more than there exists one pattern only for the processes of circulation and assimilation. Nature, at times, responds to subtle influences, of which we have no knowledge and no idea.

No exact scheme of rules, therefore, can be formed as to what measures should be adopted when the even tenor of life's course has been interrupted. As each individual differs from others when in health, so also does he differ when sick; and as every healthy person must be treated according to his own specific principle of life, so also must the invalid be treated according to the principle of disease, proper to his individual constitution.

Indulging to Excess in the Sexual Instinct, see Index.

INDURATION, or Hardenings, are of various kinds. Those on the surface usually yield to local and general stimulating treatment, for which, under certain circumstances, soothing compresses may be substituted, in combination with a vegetarian diet. According to the patient's condition, massage may be applied, in the form of rubbing, pressing, and kneading; see also treatment by massage in "Exostosis" (Index). Many indurations may be removed within a few days or weeks; others only after several months and more. For Modes of Application, see Index.

Infants, Care of, see "Women, Diseases of."

Infants, Diseases of, see "Women, Diseases of," also "Children, Diseases of."

INFECTION is the transmission of disease from one person to another; either by direct contact, or through the medium of the air.

The infectious diseases, according to present prevailing opinion, are: Diphtheria, syphilis, smallpox, whooping-cough, scarlet fever, measles, typhus, plague, etc.

The following remarks by *Kuhne*, in the periodical entitled "*The New Method of Cure*," are well worthy of notice: An acute disease, in whatever external form it may appear, is only conceivable where foreign matter has previously tainted the system. It is nothing but a violent effort of nature (acute healing crisis) to get rid of that foreign matter. Such an effort is, in fact, of itself a state of fever; or, in other words, a state of fermentation of the foreign matter in the body. If these fermenting matters are successfully expelled by the natural organs of secretion—more especially by the perspiration—then all danger is past. Perspiration is, so to speak, nothing else than the uppermost scum of this fermentation in progress. An acute illness (fever), as we said before, is altogether inconceivable, unless a chronic (latent) state of illness has proceeded it, *i. e.*, an accumulation of foreign matter in the system. That is why the chronic state is the more dangerous one. It is certain that transmission of this state of disease takes place only from parents to children; but it takes place in every case where the parents are diseased; and it is on that account, though it may long remain latent, a sure source of the propagation of all forms of disease germs.

Infection, in a general sense, has hitherto been considered possible only in an acute disease; but, as we have shown, the transmission of disease germs in a latent style, from parents to children, is exactly the same thing. Everybody knows that the butterfly is but the last development of an insect, and can be conceived only if caterpillar and chrysalis have preceded it. Thus, in the same way, an acute disease can only be imagined as the natural consequence and crisis of a pre-existent and chronic (although latent) diseased condition; and the transmission of disease—*i. e.*, of the germs of disease—is just the same in a chronic as in an acute state; only, as in the case of the caterpillar and butterfly, with a difference, as we shall presently see. An acute disease—such as smallpox, scarlet fever, diphtheria, cholera, measles, syphilis, etc.—is, as we have said, only a state of fermentation in the body, which hereby makes an effort to get rid of foreign matter. This fermentation is different (specific) in every case. The foreign matters are transformed by this process of fermentation, and now appear as the dreaded bacilli, bacteria, microbes, and micro-organisms. A particular germ is, therefore, not required for the generation of these; they are the product of fermentation. Let us bear in mind the caterpillar and the butterfly; and we shall no longer look upon these bacilli and microbes

as anything particular. See how rapidly animalcula are generated by pouring water on decaying plants. But the decay of plants is only a process of fermentation of foreign matter in the system. They are the product of fermentation.

It is during an acute illness that foreign matter is continually secreted from the body. This is more particularly the case when the patient is recovering, *i. e.*, when a more powerful and, therefore, more copious secretion takes place. Hence, the danger of infection is greatest when the patient is convalescent. In what way infection itself is brought about, I will now endeavor to illustrate by an example. We know, that by the addition of some easily fermenting substance, such as yeast, or leaven, in a state of fermentation to some other matter that ferments easily, *e. g.*, dough, milk, etc., and by giving sufficient warmth, we shall easily produce fermentation of the latter. Yeast then—itself only a product of fermentation—when added to dough or milk, communicates the fermentation to them. We say, the bread rises; the milk turns thick or sour. Exactly the same is the case with acute diseases. Here is the foreign matter in fermentation, which passes into the atmosphere in the patient's breath, and in the evaporations from his body. If, in this way, they enter the system of another person, in an unhealthy condition, and if they are not immediately secreted and cast off by that system, but are retained in it, then they produce on the foreign matter, latent in it, the very same fermenting effect that yeast produces on dough, or leaven on milk, etc.; and thus the same illness is originated in the second person as that from which the first is suffering; that is to say, nearly always the same illness, because the character of the fermentation varies with every illness—a fact which has been well established by microscopic researches into the characteristics of bacilli. This entire process of infection is, after all, nothing but the inoculation of morbid matter in a state of fermentation, from one system into another, by natural ways and in a naturally diluted state. Such matter can only set up fermentation in the system into which it is so introduced when that system contains latent foreign matter in sufficient quantity. The danger of infection by some acute disease is, therefore, only possible when a person has already sufficient taint within himself to receive it; or, as we generally say, when he is predisposed to it; and now we know what predisposition means. The difference between the effect produced respectively by natural inoculation of morbid matter, and by its artificial inoculation with the lancet, lies in the matter inoculated, and in its dilution. Homeopathy teaches that all substances are most effective in a diluted state; and that is why fermenting morbid matter in a naturally diluted state is so powerful when it finds a congenial soil. The vaccine poison, administered in allopathic doses, exercises, as do all allopathic medicines, a paralyzing

effect on the vital power of the body; *i. e.*, it deprives it of the force required to get rid of its foreign matter by an acute illness (acute healing crisis, fever), and augments the quantity of that matter, thus producing a far worse chronic (latent) state of illness—a fact, distinctly proved by the constant increase of all chronic complaints, ever since vaccination was introduced. But all the other fewer remedies, such as quinine, antifibrin, morphia, etc., have the same effect. They all paralyze every healing effort of nature (fever), and only succeed in diminishing, or even stopping, the process of fermentation of foreign matter; never in ejecting it. In this way originate all such formerly rare maladies, as cancer, extreme nervousness, insanity (paralysis), syphilis, etc. The system becomes more and more impregnated with disease, without any increase of the power to throw it off by an acute healing crisis. In the above diseases the impregnation reaches so high a point that complete relief is, in most cases, no longer possible, because the foreign matters have already destroyed, to a greater or less extent, the organs of the body, which do not grow again as they do in amphibious animals. In this connection another observation must be made.

We see medical science ever seeking new remedies, and applying them, because the old ones no longer have the desired effect. This is very natural. At first, every drug has a paralyzing effect on the vital forces, but in time these become so blunted to it that it ceases to act upon them, and then some new and more powerful agent must be sought, in order to still farther paralyze the vital power, till, at last, the fermenting process of the foreign matter in the system can no longer be stopped, and life is destroyed. One instance will render this clear. Everybody beginning to smoke tobacco must fight with his stomach till it possesses sufficient vital power to resist the poison successfully (by vomiting); soon, however, this power becomes weakened, and complete insensibility results. A more potent poison is now required for the stomach to rebel against, as it did at the beginning.

It is true, we often hear the surprising remark of people beginning to smoke, and who are not able to bear it, that "their stomach is as yet too weak; it must get used to it." Just the contrary is the case. So long as the stomach rebels against smoking, it proves that it possesses sufficient strength to eject the poison, but when it accepts it without resistance, then farewell to the pristine vital force of the stomach! It has become enfeebled.

The system now requires, in consequence of this increased latent (chronic) taint, some much stronger external influence, in order to get sufficient motive power to expel its foreign matter, because its pristine

vital force has been weakened. It is mostly a change in the weather which gives such an impetus, and that is the reason why great epidemics have always taken place after severe winters.

But let us give a few more examples to illustrate this phenomenon. Put some yeast into a bottle of beer, and place the bottle in a cool, dark cellar. Fermentation will not be easily produced. But carry the bottle into the daylight and a warmer temperature, and fermentation sets in at once, in spite of the bottle being well corked. In that case it was not bacilli or microbes that produced the fermentation, but only light and warmth. At the same time the appearance of the beer has undergone a change. Instead of being clear, it has become quite thick; and if it now contains bacilli, they are the product of fermentation, just as the butterfly grows out of the chrysalis.

We observe the same thing, taking place in the air. To-day we have a splendid bright summer day; to-morrow, a completely dull one. But we know that the clouds are formed by the condensation of the invisible moisture, suspended in the air, by a change (in this case, cooling) of the temperature; and here we see also how the specific kind of cooling produces the different forms of showers, dew, rain, hail, snow; yet it is not difficult for anyone to understand that these various forms are the products of water only. In swampy, tropical places the fermenting matter of the morasses continually fills the air, so that a short stay is sufficient to produce fever in a man predisposed to it; in other words, to set up fermentation of the foreign matter in his system (just as yeast acts on dough), producing fermentation (fever). All stagnant waters operate similarly, though perhaps not so powerfully. Only look at the marked difference between clear mountain lakes, whose stony bottoms do not cause fermentation, and other muddy inland lakes. It is true, the latter are at times moderately clear, but, at every change of weather, fermentation—beginning at the bottom—makes the water thick, so that one can often know exactly of what the bottom is composed. Stagnant waters with muddy bottoms are thrown, by a change of temperature, into the same kind of fermentation as the swamps, and, in their turn, set up fermentation in other substances.

The only question still unsolved is this: What is the cause of an epidemic where, although direct infection is next to impossible, the same disease makes its appearance sporadically in different places. Without the existence of foreign matter in the human system, the outbreak of an epidemic is inconceivable. If we look more closely into the matter, we shall find that there are epidemics every year, though they are not always so widespread as the influenza of 1890. Still it is an established fact that measles, scarlet fever, diphtheria, whooping-cough, catarrh, break out in

an epidemic form at certain seasons every year. Among people leading a somewhat similar mode of life, a certain equality may be presumed in regard to the relative amount of morbid matter; if, for instance, a change in the weather supplies an external stimulus to the vital forces, the system will endeavor, by an effort (fever), to rid itself of its foreign matter; and it stands to reason, that where a number of people are almost equally tainted, many of them will probably be similarly affected by the same cause, acting simultaneously on all, and so an epidemic will be produced. That such an epidemic like the influenza should appear to-day here, to-morrow there, is due to its cause—the weather. Just as thunderstorms appear epidemically, to-day here, to-morrow there, so it is with other changes in the weather, which enable the body to throw off its morbid matters. Once an epidemic has established itself in a locality, direct infection, as above described, comes into operation and spreads the disease. Let us imagine, for example, some apparently healthy person finding vermin, say lice, upon him. They come, in a mysterious way, when the necessary conditions are present; and once there, they increase with extraordinary rapidity.

As a rule, great epidemics have been less frequent in late years, owing in the first place, as mentioned above, to the physicians' ability, by the use of new drugs, to paralyze the vital forces so effectually that they only develop sufficient strength for a great epidemic healing crisis, when they are acted upon by some unusually powerful medium. But a far more critical, more generally prevalent, chronic (latent) state of disease has become the necessary consequence of such treatment; and we have no doubt that the time will come, when this will be understood on all sides, especially as epidemics may, and will, occur, which will verify, fully and entirely, what we have said.

Drawing now our conclusions from these considerations, we find:—(1) That in the transmission of disease from a chronic (latent) state (from parents to children therefore) the existence of foreign matter in the system is the sole cause. If we want to obviate the result, we must endeavor to get rid of the morbid matter. This transmission from parent to child is by far the worst form of disease propagation, because it must happen in every case; while infection taken from a patient suffering with acute disease will occur only when the second person has the requisite predisposition to it. (2) In cases of infection by acute diseases the transmission of fermenting matter takes place from one to the other, mostly through the medium of the air. But it is only conceivable when foreign matter (predisposition) exists in the second person, because the fermentation of such matter constitutes the disease. Pure air in the sick-room is, therefore, the first condition of cure, and this can only be obtained by opening the windows. No

perfumes, no disinfections will remove foreign matter, but, on the contrary, they will make the evil worse by contributing to the pollution of the air.

Thus we have shown, that hereditary transmission and infection, caught from a person suffering from disease, are both possible only where foreign matters are already in the system of the person infected. Without such foreign matters, there is no disease, and without disease, there can be no infection. Every kind of taint in any system is nothing but a pollution of that system. He, therefore, who knows how to keep his body clean, not only without, but also within, is insured against all infection. We are, indeed, too apt to imagine, when we see a different form of symptom, that there must be new and different causes for it; forgetting the examples that nature gives us of different forms of one and the same origin—as the caterpillar and the butterfly; rain, snow, hail, dew, and cloud.

Inflamed Tongue, see "TONGUE."

INFLAMMATION is characterized by heat, red color, swelling, and by irritation, thickening and stagnation of the blood; frequently also by pains, inability to use the inflamed part, shivers, fever, general discomfort, loss of appetite, lassitude; the last being particularly the case in more violent inflammations of the principal internal organs.

CAUSES.—Inflammation supervenes either after some abnormal external shock, such as a push, knock, or wound, received in some part of the body; or in consequence of morbid modifications of the blood, or of the cells of the respective parts; as well as upon a serious derangement in the organs of nutrition, etc. Inflammation which may be of longer or shorter duration—according as the original diseases and causes are either superficial or more deeply seated, and according to the success of the treatment adopted—always end either with dispersion, exudations (absorption), or with ulcerations, suppurations, and mortification.

TREATMENT.—Cool (54° to 75°) local compresses, to be renewed when they begin to be warm, or, better still, warm or hot compresses, to cause suppuration as soon as possible; when this takes place, apply stimulating local compresses. In bad cases, especially in inflammation of the principal internal organs, a derivative treatment is to be combined with the cool compresses. For such cases, see the article on the part affected—"BRAIN," "STOMACH," etc. The attendant inflammation will be cured with the disease, of which it is a symptom, if the treatment be properly carried out. The primary conditions for such a cure are, non-stimulating diet, fresh air, and rest for the inflamed part. For Modes of Application, see Index. See also "FEVER."

Be it observed once more, that cooling compresses are not the only thing applied in inflammations, but also stimulating (derivative) packs, so that—*e. g.*, in inflammation of the brain, or the throat, the head, or as the case may be—the throat is *cooled* by cool bathing and cool compresses, while stimulating packs—applied during a longer time to the body, legs, or forearms—draw the blood to the surface and downward, and are calculated to obtain the solution and excretion of morbid matters in other than the inflamed parts, and thus indirectly to relieve and soothe the latter. In inflammation of the thoracic organs (heart, lungs) or of the abdominal organs, cooling and soothing compresses are applied over those organs, but stimulating ones round the arms and legs. A hot-water bottle for the legs and feet is also to be recommended.

TREATMENT BY MASSAGE.—Rolling (kneading) of the arms and legs downward, rubbing them upward. (See "MASSAGE" in Index.)

Inflammation of an Aural Salivary Gland, see "MUMPS."

Inflammation of Diaphragm, see "DIAPHRAGM."

Inflammation of the Intestine, see "INTESTINAL CATARRH."

Inflammation of the Large Intestine, see "INTESTINAL CATARRH."

Inflammation of the Small Intestine, see "INTESTINAL CATARRH."

Inflammation of the Tonsils, see "TONSILITIS."

INFLUENZA. This is a disease appearing from time to time in an epidemic form over large portions of the earth. The first appearance of the disease in Germany, on a large scale, took place in 1899—'90. At first the disease was not considered serious. "This is nothing more than an ordinary cold," was a common remark, till the large number of deaths and the frequent occurrence of complications proved that it was an entirely different disease. The early symptoms of influenza are usually similar to those of measles. Cold in the head, cough, weakness, depression, accompanied by the characteristic feeling of weakness in the spine, a feeling as if the latter were broken in two. These symptoms are immediately followed by fever, the temperature frequently rising to 104° in the morning and evening. It is a remarkable fact that the period of incubation or preparatory stage, which is present in most febrile epidemic diseases, is entirely absent in influenza. The writer has sat down to dinner in the middle of the day with a perfect appetite, and been attacked by influenza in a pronounced form at three o'clock in the afternoon, with fever and a temperature of 104°.

In the case of young and strong people, the ordinary course of the disease is the same as with a feverish cold. The catarrhal symptoms and high temperature continue for several days, then slowly subside, and the patient is restored to health in about a fortnight. The case is different with old and weak people; here not only do the fever and catarrh continue longer, but lung affections, tuberculosis, heart disease, digestive disturbances, anæmia, and nervous weakness are liable to occur, so that the number of persons who succumb to these secondary diseases is far greater than that of those who fall a victim to the primary disorder.

Allopathy naturally took the field against this disease armed with its usual paraphernalia of poisons. All the "ines" already known, and many new ones, *e. g.*, oninine, antifebrine, antipyrin, salipyrin, etc., were tried. The only people who were benefited were the druggists and chemical manufacturers who were enabled to pay unprecedented dividends to their shareholders.

And yet, what a simple and easy thing it is to cure influenza successfully and radically with the remedies of the Natural Method of Healing. The complications to which we have referred never occur when the disease is treated by our method. For these complications only arise when the system is too enfeebled to eliminate all the morbid matter, which collects in the weaker organs, and gives rise to disease in them.

The advantage of our method is, that it so effectually aids the system in its endeavor to throw off the morbid matter, that it seldom happens that anything injurious remains behind.

Treatment.—In the first place a steam-bath, followed by a full pack and bath, or a steam-bath in bed, followed by a bath, should be given every day for two or three days to promote free perspiration; afterward it will be enough to give the above every second or third day. Should, however, fever be present, this should first be removed by soothing full packs. The duration of the latter should be half to three-quarters of an hour, and they should be followed by a bath, or a bath alone may be taken, and the patient wrapped in a linen sheet, without being dried, and put to bed, in order to produce a copious exhalation. Then a derivative treatment should be resorted to, *viz.*, foot steam-baths (100° to 122°) of eight minutes' duration, followed by stimulating foot and leg packs and soothing abdominal packs or abdominal compresses. In case of headache, cool bandages on the head and neck are advisable, to be changed every ten minutes. Water of a temperature of 82° should be used every hour or two for gargling and drawing through the nose,

and steam should be inhaled to loosen the phlegm. The treatment recommended for catarrh of the windpipe or cold in the head may also be resorted to. See "CATARRH."

Care must, of course, be taken that the sick-room be properly ventilated, and the patient, well wrapped up, be taken for an hour occasionally into the open air, when the weather permits.

DIET.—As long as appetite is absent, no solid food should be taken, and only cool water and lemonade drunk. As soon as the patient's appetite begins to return, his nourishment should at first be limited to gruel, boiled fruit, and a little of Graham's bread, changing gradually first to invalid's, and afterward to normal diet. See also "INFLUENZA" under Kneipp Cure. For Modes of Application, see Index.

Influenza, see "CATARRH."

Inguinal Hernia, see "HERNIA." Also treatment with massage.

Injections into the Rectum, see "ENEMA."

Injection Syringe, see "ENEMA."

Injuriousness of Eating Hot Food, The, see Index.

INJURY, CURE OF A SEVERE. By the therapeutist *v. Seth* of Bremen. (From the periodical of hygiene and therapeutics.)

The railway-employee *Franz Rosenthal*, Alwinen-Strasse 19, in Bremen, had the misfortune on September 27th, 1882, in shunting railway-carriages, to get between the buffers of two of them, with the result that the chest and right arm were greatly injured. The railway doctor, Dr. *J.*, had the patient taken to his home, and prescribed hourly rubbing with some ointment. He declared next morning that there was not much hope of saving the patient's life. Then I was called in, and found his chest and stomach swollen like a sack of flour. The right upper arm was likewise very much inflamed, and displayed a wound, five to six inches long. The patient was hardly able to breathe, much less to speak; and the action of the heart was no longer perceptible. I, at once, placed a towel, wrung out in cold water, on the chest and abdomen, and changed this compress at very short intervals during the first quarter of an hour. I then left the wet cloth on for a quarter of an hour, after which I again changed it, as at the beginning. After the sixth application—a space, therefore, of three hours—I was able to leave the compress on for thirty minutes. On the evening of the same day, the swelling had already sunk to half its size, and I could again feel the beating of the heart. The patient could breathe more easily, and drink

some water. For the night I had a moist sheet, folded in eight, put under his back, and I changed the compresses on the chest, according as he felt. Previously he had had enemata, as the bowels were not open.

On the next morning he received me with a laugh, and was already enjoying oatmeal gruel.

I then introduced a derivative and locally more stimulating treatment. On the sixth day he could sit up; on the tenth, he took a walk; and in the fifth week he went out cured to follow his calling. See also under "FALL" in Index.

Inner Wrap of Bandage or Compress, see Index.

Inoculation, see "SMALLPOX."

Insanity, see "MENTAL DISEASES."

INSECTS CREEPING INTO THE EAR. If insects enter the auditory canal deeply, water must be quickly poured or injected into the ear, during which procedure the head must be held a little on one side, so that the creature either comes out or is suffocated.

Insects, Stings of, see "BEE STINGS."

INSOMNIA (or Sleeplessness) occurs (1.) often as an accompanying symptom of many diseases; (2.) as a consequence of pain, or of noise (as of young children's crying, etc.), and generally as a result of irregular sleep; (3.) in consequence of keeping late hours, of exciting mental work, or the use of such stimulants as coffee, tea, etc.

TREATMENT.—When it is a symptom of some other disease, it will disappear with the cure of the latter; but meanwhile any of the following remedies may be applied to mitigate or remedy it.

If sleeplessness has been produced by causes given under (2.), these causes must be removed, regular habits must be cultivated, and the diet regulated; heavy and late suppers avoided, and indigestible food eschewed. Washing with tepid water (73°), and wet rubbing of the whole body shortly before going to bed will, in most cases, secure sound, refreshing sleep.

A stimulating abdominal compress sufficiently wetted to retain its moisture till getting-up time, and calf packs of the same nature during the night, are excellent means of producing sleep. Gymnastic exercises regularly practised during the day, but, above all, walks abroad and fresh air in the room. A tepid (77°) enema before retiring to rest, followed by a cold one, as a means of opening the bowels will be of use.

The following further hints may be noted:—

Laying the back of the head and the nape of the neck on a large towel, wrung out in cold water and several times folded, will prevent an excessive determination of the blood to the head and brain, which is a frequent cause of sleeplessness, and sleep will thereby be brought about. A piece of old silk, or waxcloth, must be laid under the towel to keep it cool, and to prevent it from wetting the bed. Looking fixedly at one object is said to lead to sleep after some time; or better to fix the eyes (with a night-light burning), upon some bright disk or pane (a window-pane with white paper pasted behind it.) The time of awaking in the morning should be fixed in the memory by a firm exercise of the will. Slow and deep breathing, continued for some minutes (with the mouth closed), is conducive of sleep, because, by it, the overcharging of the brain with blood is prevented. In the same sense one may imitate a sleeping person, in order soon to fall into real sleep.

The plan of forcing oneself to sleep by intoxicating drinks or narcotic drugs is most injurious and reprehensible, and should be utterly rejected.

Sleeplessness of children, being caused in most cases by deranged digestion, will generally be at once cured by a stimulating abdominal compress, with the result that children who may have been in the habit of crying all through the night will fall asleep after one such compress. The child should also have a lukewarm (85°) enema, followed by a cool one, before being put to bed, in order to open the bowels. Young children usually sleep soundly for several hours if bathed, and thoroughly rubbed, before being put to bed.

In addition to what has been said, it may be mentioned that—above all—massage, as described under "STRENGTHENING TREATMENT" (see Index) is to be employed, and that gentle stroking and rubbing, as directed under that heading, is to be applied in the evening as well. Sleeping with a window open and detergent treatment are often effectual means of cure. For Modes of Application, see Index.

For the sake of further completeness, I append a case of "SLEEPLESSNESS,". taken from the *"Zeitschrift für volksverständliche Gesundheitspflege."*

CHRONIC INSOMNIA.

Cured by the Natural Method of Healing.

In the report of a cure written by Mrs. *Hilscher*, the wife of a tradesman in Dresden, the lady says: "For six long years I never closed my eyes in really refreshing sleep. In addition I suffered from noises in the

ears, pain in the loins, a feeling of tiredness in my legs and knees, rheumatic pains, swollen eyes, and was troubled with a number of other disagreeable and painful ailments. The medical men, whom I consulted, told me that nothing could be done, that I must have patience and trust in the future. But all my patience and waiting were in vain—no improvement took place—in fact, my condition got worse and worse as time elapsed, and, after a serious attack of intermittent fever succeeded by a very enervating bout of influenza, I had very little hope of ever recovering my strength at all. Subsequent to these illnesses I was troubled with a profuse sticky perspiration which weakened me still more. The last ray of hope that remained was a course of baths at Bad Elster, but from these I derived no permanent benefit, for soon after my return home all my ailments appeared again. My doctor now seemed to think the time had arrived for more drastic measures and prescribed aperient pills and a sleeping draught (morphium). These drugs, however, had no soothing effect whatever; they caused a feeling of warmth, it is true, but next morning I felt more tired than ever.

While in this dreadful and hopeless condition, several people called my attention to the Natural Method of Healing. I was told that a number of my acquaintances, whom I had not seen for some time, had been completely cured of the diseases from which they had for years been suffering, by the judicious treatment of the president of the Dresden Society for the Natural Method of Healing, Herr *v. Bistram*. In order to convince myself of the truth of these statements, I went to see these people, who substantiated all that I had heard about their cure. Without loss of time I went with my husband (who had vainly tried all sorts of remedies for an abdominal complaint from which he had long been suffering) to consult Herr *v. Bistram*, who, after a thorough examination, informed us that we were by no means in a hopeless condition, and that we had every prospect of complete recovery. However, he said that such ailments could not, as a matter of course, be cured in a short time; that a cure was altogether independent of the doctor, and that nature alone would right herself if but aided by the energy and persevering determination of the sufferer.

On my part there was no want of will and determination to carry out his directions, and, after a fortnight's strict observance of everything, I was rewarded for my perseverance. My head was much lighter, all the functions of the body acted with greater regularity, my appetite was much better, and I experienced an elasticity in my limbs such as I had not felt for years; my rheumatic pains had vanished entirely. In short, I felt that I was on the high road to complete recovery, and

that I had every prospect of being able to perform my household duties again.

But what pleased me most was, I began to enjoy sleep again. Hitherto I had never been able to close my eyes before morning, and now I was able to get an hour and a half's sleep before midnight. During my illness my daughter used to talk to me for hours to alleviate my sufferings, and now she was quite surprised to find that I was not paying attention to what she was saying, and was delighted to find that I had fallen fast asleep for the first time in so many years.

But, just as Herr *v. Bistram* had warned me, my condition varied greatly for some time. Some days I noticed a great improvement, and on other days I felt worse again, but after strict attention to his directions for several months, the improvement became permanent, and I was entirely free from the ailment which had troubled me for so many years.

What was it that brought about this great and desired change? Nothing more or less than doing what common sense says every person should do, even when in the best of health. That is:—refrain from the use of all nerve-destroying irritants, give proper attention to cutaneous action, take regular exercise in fresh air and carefully attend to all that promotes the regular functions of the organs of the body.

These were important things that our doctors had never spoken to us about, and a knowledge of which is absolutely necessary to recovery. I feel it my duty to publicly express my thanks to Herr *v. Bistram* for the infinite trouble he took with us and the results of which was our complete restoration to health.

Dresden. Mrs. *K. Hilscher.*

INTERGROWTH in the shoulder-joint, in the neck and arm-joint, on the knee and ankle. To loosen them, frequent steaming, stimulating compresses, massage and curative gymnastic exercises are suitable. These exercises consist of extension motions of the arms for the first mentioned; rolling and thrusting the arm for the second named; leg rolling, stretching and bending the foot or knee, and sitting on the heels, etc., for the third named. See also "STIFFNESS" or "PARALYSIS."

Intermittent Fever, see "AGUE."

INTESTINAL CATARRH (Acute). Inflammation of the intestine. This disease very rarely attacks the whole intestine, but nearly always a single section, especially the ileum, colon and redum (position of the viscera).

Symptoms.—In most cases a fixed, burning, or drawing pain is felt, usual in the umbilical region or lower down. It is increased by any external pressure or by movements and concussions of the abdomen. It is limited at the commencement to a small region, but spreads in time and occasionally over the entire abdominal region. The symptoms in the acute form vary according to the seat of the disease, if, *e. g.*, frequent liquid evacuations (diarrhœa) occur, it is the small intestine that is affected; there are generally no pains in this case, but colic-like attacks take place at times, disappearing again after stool. In the case of the large intestine being affected, there is a burning sensation in the anus, and pains occur in the abdomen, particularly in the umbilical region with violent tenesmus. When after much pressing an evacuation does take place, it is generally very small and mingled with blood and gelatinous mucus. Relief only follows upon an evacuation of larger, harder and clotted masses of excrement, because it is just these which in a good many cases are the cause of the catarrh. Similar symptoms occur when the rectum only is affected with catarrh, but in such cases there are no pains in the abdomen. Other symptoms are: a dry, more or less furry tongue, great thirst, loss of appetite and headache. This disease makes its appearance sometimes with, sometimes without fever.

Causes.—Chill to the feet or abdomen, change of weather (by reason of which this disease may also assume an epidemic form), eating heavy or bad food; or the passing into the intestine of the undigested contents of the stomach in a state of decomposition, causing irritation to the former organ, strong irritants as emetics, etc.; accumulations of hard masses of excrement, worms, fright, anger, fear, etc.; also strangulated hernia (there are, as is well known, insignificant cases of hernia, showing little if any external swelling). Now and then this disease is met with in conjunction with other severer maladies, as cholera, typhus, tuberculosis, diseases of the liver, etc.

Treatment.—Tepid (66° to 77°) soothing abdominal compresses (duration, half an hour, or as long as they can be comfortably borne). In very painful and troublesome cases, apply repeated steam compresses, also warm pads followed by soothing compresses; also put an abdominal compress, or tepid compress on the painful part, in connection with which vibrations should be resorted to; a lukewarm (90°) bath daily with an occasional lukewarm (82° to 85°) hip-bath (fifteen to twenty minutes) is expedient; plenty of water should be used for them, steam-bath may also be given instead. Constipation as well as diarrhœa should be counteracted by enemata, which may also be used as a derivative. Fresh air, non-stimulating food, thin oatmeal or barley gruel. Sago, fruit and

whole meal bread should be avoided. For Modes of Application, see Index.

Treatment by Massage.—Consists, when there are violent pains in the abdomen, mainly in continued friction of the lumbar region, kneading the arms and legs, and then softly stroking, rubbing and vibration of the abdomen. Sometimes advantage is derived from persistent friction of the abdomen, to be applied, however, only on the advice of a professional masseur, and when the inflammatory conditions have been removed.

INTESTINAL CATARRH (Chronic) is usually unattended with fever. Diarrhœa and constipation frequently alternate with viscid, slimy, jelly-like stools. Passing wind and evacuations always procure relief, whereas constipation depresses the patient and lowers his vital powers. Further symptoms are: inflation of the stomach, sensation of pressure, particularly after meals, disturbances of nutrition, heartburn (pyrosis), eructations from the stomach, vomiting, general debility and depression; with little children, rapid emaciation accompanied with inflated stomach.

The chronic is generally preceded by the acute form. Other causes, which render intestinal catarrh chronic very frequently, obtain, as intestinal ulcers, heart and lung diseases, affections of the liver, etc.

Treatment.—A tepid (77°) wet rubbing of the whole body with massage of the abdomen every day; tepid (77°) abdominal compress every night, to be taken off in the morning or after from two to four hours if troublesome, besides a daily lukewarm hip-bath of twenty to twenty-four minutes' duration. Also lukewarm (77° to 86°) enemata (twelve to fifteen spoonfuls), after stool a small tepid (68° to 72°) enema (four to five spoonfuls). Non-stimulating, light, very moderate nourishment, much exercise in the open air and well-ventilated rooms.

A Second Treatment.—Full steam-bath (fifteen to twenty minutes) with succeeding full pack (from half to three-quarters of an hour), next a lukewarm bath (86° to 90°) with affusion of the abdomen. Where a box steam-bath cannot be obtained, a bed steam-bath (one and a half to two hours) may be substituted. Then a bath as above, or a tepid one (72°), with wet rubbing and combined with massage of the abdomen. Also a lukewarm (77° to 86°) hip-bath of twenty to twenty-four minutes, daily. Enemata, etc., as in the first treatment. These applications to be repeated every day during the first week, afterward every alternate day. For Modes of Application, see Index.

Treatment by Massage to consist mainly in gently stroking and kneading the abdomen, beginning at the pit of the stomach. The best

time for this is after a cool enema, or in the morning in bed, but always with the legs drawn up. See also "INFLAMMATION OF THE CŒCUM" and "INTESTINAL CATARRH" in Kneipp Cure.

CURE OF A BAD CASE OF INTESTINAL CATARRH.

From WEICKER'S book "Nature Cures."

Mrs. *I. H.* was treated by me for gastric, liver and intestinal catarrh. After five years' medical treatment the stomach, intestine and liver became indurated, and then the fifth doctor, a man of considerable scientific attainments, declared he could not procure relief, as the stomach could no longer digest anything. Under my cautious treatment the lady recovered, digested all food, which I allowed her to take, and could resume her household duties in three months' time and has enjoyed health and happiness to this day.

CURE OF INTESTINAL CATARRH.

By DR. KOERNER.

I give below some successful cures of intestinal catarrh, a complaint which, as is well known, is considered one of the most dangerous of inflammatory diseases, and one which, as ordinarily treated, claims many victims, as I had occasion to observe during the earlier years of my practice, many cases coming under my treatment with fatal issues, which I could certainly have prevented had I, at that time, been acquainted with the Natural Method of Healing. Four of the above patients suffered from inflammation of the small and the others from inflammation of the large intestine.

I treated four patients for inflammation of the small intestine (three of them from the second day of the commencement of the disease), a man, thirty-nine years old; a farmer, eighteen years old; a tax collector, twenty-five years old, and a boy, aged twelve, from the third day of his illness. The following were the principal symptoms: The patients complained of racking and burning pains in the umbilical region, of a colic-like character, lessening in violence from time to time, with intermissions of from half an hour to one hour. These intervals, however, became shorter and shorter, whereas the accesses of pain lasted longer, so that only very short intervals of painlessness were observable between the attacks, till these intervals also ceased and the paroxysm was permanent. The pain spread from the navel, as the central point, over the abdomen, which was inflated, distended, stretched and hard. The

latter was highly sensitive to pressure and the patients screamed loudly; the sufferings of the boy, in particular, were so intense that he kept moaning and crying out continually and could not bear the slightest touch. All four suffered with obstinate constipation and were inclined to vomit. The boy had already vomitted several times, discharging much phlegm with some greenish admixture. The disease had commenced in his case with shivering, followed by great heat. The temperature was unevenly distributed, the extremities were cool, but the trunk burning hot, the pulse small, quick, contracted, and hard. The tongue was furry and dry; the thirst very great; the face flushed, in the case of the boy somewhat pale and sunken. They all were tormented with frightful uneasiness and restlessness and the most violent pains. In each case the complaint had been caused by catching cold suddenly when the body was in perspiration.

I treated five persons for catarrh of the large intestine; three of them were peasants, one a sailor and one a pensioner, aged sixty-five years. Two of the peasants, men with vigorous constitutions, had been treated medically for five days, and the sailor for four; I found them in so critical a condition that death from gangrene of the intestine seemed inevitable in a short time. Although they were suffering from inflammation of a malignant character, they had been treated with warm compresses on the abdomen, with the result that the inflammation had naturally increased and mortification must have ensued if they had not had recourse to the Natural Method of Healing, which was still able to remove the danger. The inflammation had in each case been caused by a sudden cold in the cœcum occurring after frequent attacks of colic with constipation or diarrhœa. The disease had made its first appearance in the region of the right iliac spine, and was attended from the first with nausea and copious vomiting of green gall. The patients who had been treated medicinally suffered continually from nausea, and their evacuations often consisted of a brown, evil-smelling fluid. In connection with the constipation a severe pain was felt in the region of the os ilci, where a hard swelling was to be felt; this pain increased with every movement, and was so violent in patients treated medicinally that they screamed aloud and were nearly mad with fear, anxiety and pain. This could scarcely be otherwise, for external heat had been added to that felt internally, whereby the inflammation was, as a matter of course, only increased and the suffering intensified. Such treatment can be compared to the irrational conduct of a person who pours oil on a fire in order to extinguish it. The temperature of the body was very high, the pulse feeble, rapid and uncertain, the thirst could not be quenched; at night the patients wandered in their minds, and this occurred also in

the daytime in the case of the pensioner who was constitutionally nervous. As regards the treatment of these cases, I was obliged to adapt it to the severity of the ailment, and will only mention here that an inflammation of the small intestine was much more easy to heal than that of the large intestine. I prescribed soothing abdominal packs for all the patients (these packs were made of table cloths of suitable size, folded three or four times), who experienced great relief and were loud in their praises of the result. I had a warm vinegar compress put on the boy's feet (as these were cold), by which the congestion in the abdomen could be drawn off. The diet consisted of thin rye-flour soup and water to drink. The one who suffered from an inflammation of the small intestine had the compress left on until general perspiration set in, and when this had lasted two hours, as the fear and pain were not increased thereby, the compresses were then removed, and again renewed when the perspiration stopped. Instead of full packs, large compresses, which cover the whole of the abdomen, can be used and renewed as often as they begin to get warm. Three of these patients were rid of their severe pains by the third day and they only had occasional light pains to bear. They recovered so quickly that they were out of danger and could get up on the fourth day.

CURE OF A CASE OF INFLAMMATION OF THE INTESTINES AND FISTULA.

Treated in the BILZ Sanatorium, Dresden.

A true story related by JOSEPH SCHMALL, Vienna.

One day early in October, 1893, my friend, *F. B.*, visited me and complained of violent pain and wind in the stomach. My proposal to apply some natural remedies found no acceptance, and he neglected his complaint in the full belief that it would cure itself in time. The pain, however, did not disappear; on the contrary, it grew so violent and was accompanied by such high fever and long periods of unconsciousness that eventually a doctor had to be called in.

The doctor's orders to apply cold compresses to the stomach and to rub it with a brownish ointment were strictly followed out and continued for five days; instead, however, of the desired improvement, the pain, fever and periods of unconsciousness increased, the doctor seemed to be at the end of his resources and another was called in who pronounced the case to be one of appendicitis and declared it to be absolutely necessary to convey the patient to a hospital. To the nearest hospital, therefore, he was taken on the following day, and for four weeks was treated

with cooling applications to the body and enemata daily, at first with glycerine, afterwards with salt!—as he suffered from obstinate constipation. These salt enemata made the patient's anus so raw and painful that the anticipation of going to stool continually distressed him. Moreover, the treatment proved ineffectual, and as the swelling had become as hard as a stone, it was rubbed with tincture of iodine and mercury alternately, not a thought being given to cleansing the sore place each time. For three or four months the patient had hardly any sleep; day and night he had to endure the most excruciating pains, and, was obliged to be constantly in one position, *viz.*, on his back, for the least movement increased his agony; in addition to this he generally had high fever. His strength began to fail rapidly, and to arrest utter collapse, the physician ordered half a pint of wine daily.

In spite of this strengthening (?) medicine, the patient grew weaker and weaker, the hard swelling would not disappear but remained the same size, so that our friend, the doctor, proposed to adopt a more severe treatment. That is to say, he thought the most effectual means would be for the patient to get out of bed and take exercise daily. My friend attempted one day to follow this advice, but found himself unable to do so, as his feet would not carry him and by his exertions he contracted an aggravation of his malady in that the swelling grew much larger and more painful.

In the beginning of March, 1894, an operation was performed, the wound which had formed was syringed with corrosive sublimate and an india-rubber tube inserted to carry off the pus; a few weeks afterward the excrement was drawn out of the intestines in the form of a thick, hard mass about twenty millimetres long and eight wide.

After about six weeks it appeared as if the wound would heal, but fate had determined otherwise for our poor patient, for a new doctor came to the ward, and by imprudent manipulation (in fact, in consequence of uncleanliness) protracted the stay of the patient another five weeks.

Immediately after treating another wound, this gentleman took off the bandage whereby a violent burning and terrible pains were caused, which were followed by the wound becoming deeper and finally a fistula, two inches deep, forming.

The time had now come, thought this celebrity, to show the full extent of his wisdom, so he began to measure out the wound with a probe and then plug it up with gauze steeped in iodoform, so that my friend thought he must fancy he had a bottle to cook instead of a human body to treat.

This, then, is the treatment pursued in a hospital conducted upon

the latest principles of medical science and fitted with every modern appliance of comfort and hygiene! For my part I would rather have nothing to do with such a science, and my friend has, by a sad experience, come to form the same opinion. Not one man in twenty could stand such a treatment as I have described.

In consequence of the extravagant use of iodoform, carbolic acid and other drugs, and the windows being generally closed, the air had become so vitiated that I shrank from visiting my friend, as the rest of my day was thus utterly spoiled.

My friend, however, had to spend more than seven months in this atmosphere, and it appeared to me as if he no longer cared about getting well; he was absolutely indifferent and resigned to what might happen, utterly careless as to the future.

I, however, as an enthusiastic and convinced adherent of many years' standing of the "Natural Method of Healing," to which conviction I had been brought by that highly instructive work, "Bilz, The Natural Method of Healing," waited for a favorable opportunity to remove the poor fellow from this place, where he had hovered between life and death for full two hundred days.

Shortly before he left the hospital, the doctors wished to perform a second operation on him; he, my friend, would not consent, as he became aware, by the doctor's manner of enquiring whether he was willing that he was the living mark of interrogation in regard to the successful or unsuccessful result of the experiment.

After this refusal the medical art could, of course, do no more, and the only consolation left to my friend was the retention of the fistula during the remainder of his life, the thought of which embittered him exceedingly.

Meanwhile, but without betraying the fact to my friend, as otherwise my plan would have been frustrated, I had written to Bilz' Sanatorium in Radebeul, Dresden, and asked to have my unhappy friend received there, and Mr. *Bilz* had requested me to bring him with all confidence, that, if indeed not too late, an improvement could be effected and a cure wrought by the "Natural Method of Healing."

I really thought nothing could be done with a patient so utterly prostrated and often gazed at him with sympathetic looks, nor was I at all clear with regard to the long railway journey of sixteen hours from Vienna to Dresden; my resolution was, however, after mature consideration and the most violent opposition on the part of my friend, successfully carried out.

The journey turned out better than I had thought; the fresh air from the open window (diametrically opposite to the vitiated, confined

air of the hospital) acted so invigorating on my friend that I was able once more to see him put on a cheerful face.

On Whit Monday, 1894, at five o'clock in the afternoon, we arrived at the Bilz' Sanatorium, where we were most kindly received.

After taking a little rest in a charming arbor and refreshing ourselves with something to eat and drink, the attendant took us the round of the premises.

We inspected everything fairly thoroughly, and everything, especially the baths which were magnificently got up, more than came up to our expectations.

The treatment, carried out by the most competent and conscious attendants and adapted to the particular case, was as follows:

On the stomach oatstraw compresses were put, and for local treatment extra compresses on the wound; moreover, box steam-baths, packs, warm shallow and hip-baths, and, above all, those excellent things, sun-baths, on which last my friend expressed himself most enthusiastically and regretted that the sun showed itself but too little to allow him to have the benefits of its rays upon his feeble body as much as he wished. A few days later, my friend had to sleep in the open air in a hut erected for the purpose. This agreed with him exceedingly well, and contributed in no small measure to his improvement. His diet was chiefly vegetarian, and included plenty of fruit and milk, but very little meat and no old strengthening wine and no nourishing beer, but as morning draught invaluable gruel, etc.

Mental recreation was also provided, and care was taken to prevent ennui. Billiards, skittles, concerts, picnics, formed part of the treatment, so that my friend could not find words to express his satisfaction at his stay here.

The patient's general state of health soon became entirely satisfactory, but at first the fistula showed no disposition to heal permanently, that is to say, it often healed up but opened again, so that my friend began to despair of a permanent cure.

Finally, however, after much trouble and careful nursing, the fistula healed and closed completely in about a month, and a month later my friend was able, thank God, to leave the Sanatorium perfectly cured. On the way home he visited some relations, and on October he resumed his occupation after a year's enforced interruption.

Had my friend followed the doctor's advice and not mine, and allowed himself to be operated upon, he would to-day undoubtedly be a helpless cripple and not in a position to earn his daily bread again. That he is so now, is due to God's help, to me and to Mr. *Bilz* and his splendidly managed Sanatorium.

To-day my friend is the healthiest man alive, cheerful and merry, and confessed to me, with a proud heart, I say it, that he felt like a new man and had never been so well as now.

See also "REPORTS OF CURES."

INTESTINAL COLIC. By intestinal colic we understand violent griping, cutting pains in the abdomen which occur in periodical attacks, leaving painless intervals. The pains of colic have their seat in the region of the navel and radiate in all directions. By some pressure they may generally be alleviated in contradistinction to the pains attending inflammation which are increased by pressure. The abdominal walls are drawn tight, the abdomen is either drawn in (particularly in the so-called lead colic) or blown out like a drum by the gases collected in the intestines; constipation is usually present and the attack often ends with a discharge of gas. These pains are, properly speaking, nervous pains, arising partly directly, partly indirectly through irritation of the nerves of the intestines. The nerves may be directly irritated by partaking of indigestible food or of things in a state of fermentation (bad beer or too new beer or wine, unripe fruit, etc.), or accumulation of excrement, by intestinal worms, by using purgatives (*e. g.*, senna tea).

By internal irritation, *i. e.*, caused by other organs acting on the nerves of the intestines, *e. g.*, colic arising from chill. Moreover, menstrual and hœmorrhoidal colic.

TREATMENT.—In treating colic, due regard must, as a matter of course, be had to the particular form and its origin. In order, however, to afford temporary alleviation of the frequently unbearable pains, we recommend the application of hot cloths, or a hot-water bottle, or a hot brick wrapped in flannel. Above all, warm hip-baths reaching above the navel, and, if lasting for any length of time, fresh hot water should be added. The feet should be wrapped up warm. The violent pains, if so treated, will soon abate. Then give a lukewarm (86° to 91°) detergent enema and several cups of hot camomile tea or fennel powder boiled in milk.

Wind generally passes and thereby the severity of the attack is reduced. Should the pains return a few times, they will not be so violent as at first, and, if this treatment be continued a little longer, will disappear entirely. The aim of the treatment will, of course, be to remove the original ailment which gave rise to the colic, and thereby prevent a recurrence of the attacks.

For Modes of Application, see Index.

KNEIPP CURE.—Hot hayflower compresses. Aniseed, fennel and peppermint tea.

DISEASES OF THE INTESTINES AND NORMAL POSITION OF THE INTESTINES AND SOLAR PLEXUS.

II



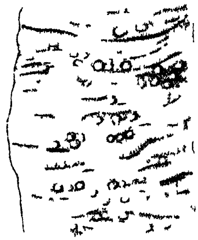
1. Inflammation of the Rectum



2. Tuberculous Ulcers of the Intestines



3. Typhoidal Ulcer of the Intestine



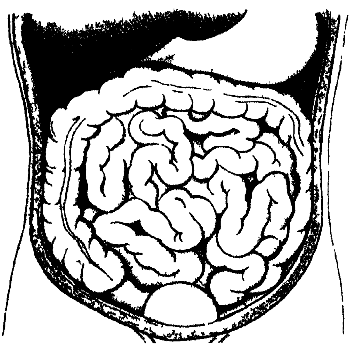
4. Inflammation of the Large Intestine



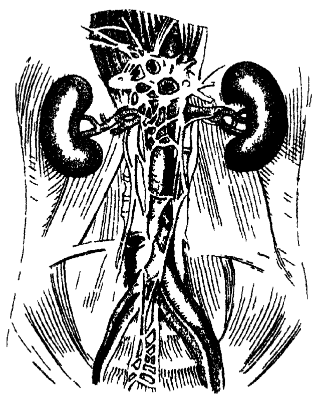
5. Inflammation of the Cœcum.



6 Fœcal Calculus



7. Normal Position of the Intestines.



8. Solar plexus of the Sympathetic Nerve. (Printed yellow.)

INTESTINAL INVAGINATION. Intestine Volvulus, or Twisting of the Intestines, may arise in various ways, *e. g.*, through exterior strangulation of the intestines, resulting from different kinds of hernia;—through interior strangulation of the membranous tissues spread out between certain intestinal parts, which frequently occurs in abdominal inflammations;—further through one intestine sliding (telescoping) partly into an adjacent one when violent action of the bowels suddenly ensues after obstinate constipation; or through violent diarrhœa resulting in twisting of the intestine in consequence of the adhesions of the vermiform process;—through an intestine twisting round itself, in consequence of a relaxed condition of the abdominal integument, and viscera; through the narrowing and obstruction of the intestinal passage by the scars of ulcers in the wall of the intestine;—through cancerous growths;—through pressure, exerted by morbidly enlarged abdominal organs, or by any other tumors on some parts of the intestine;—through the large intestine being obstructed by masses of excrement.

SYMPTOMS.—Violent pains are felt in the first place, in some parts of the abdomen, in consequence of strangulation or twisting of the intestine; next, such obstinate constipation that nothing will relieve it; the vomiting of yellowish green masses resulting from general peritonitis; the pains, starting from the inflamed part, spread over the entire abdomen. The stomach is inflated, and the patient is seized with intolerable pain (such an internal strangulation may continue from a week to a fortnight). The narrowing or partial closing of the intestinal canal is productive of various conditions and symptoms. If, for example, dull colic pains, swellings caused by excrement, eructations from the stomach, vomiting after typhus or dysentery, take place—these symptoms point to a narrowing of an intestinal passage. If an intestine has telescoped into another—in which case there is mostly on the left side a soft, elastic, sausage-shaped swelling—constipation alternates with diarrhœa, the stools being highly charged with blood: later on vomiting takes place.

TREATMENT.—Continuous local soothing compresses (which may be applied in combination with a detergent treatment), and frequent cool (66°) enemata. A bath may also be given with fomentations of the abdomen; massage, moreover, performed by a masseur on the spot, does good service in such cases. Very sparing, non-irritating diet, and fresh air.

For Modes of Application, see Index.

Intestinal Worms, see "PARASITES."

INTESTINE, ABSCESS IN THE. Abscesses in the intestines are found in various diseases, and may be regarded as symptoms of a great number of ailments.

1. **The lightest and mildest form of intestinal abscess is the catarrhal** one. If an intestinal catarrh has existed for a long time, as in chronic diarrhœa, *e. g.*, dysentery, the intestinal mucous membrane is permanently congested with blood. In consequence of the constant pressure of the blood on the vascular walls, the latter burst and cause a wound or abscess in the intestine. If the intestinal catarrh abates gradually, the mucous membrane is no longer so badly congested, and the abscess begins to heal. The wound is again covered with normal mucous membrane without cicatricial tissue, and not a trace of the ailment remains behind.

TREATMENT.—Strictly non-stimulating diet; it is best to take gruel and milk only for a length of time. Enemata—one to a pint and a half of water—or, better still, pewter-grass or oak-bark infusion (which see) injected well up into the bowels; hip-baths of fairly long duration (77°), say, twenty-five to thirty minutes. At night, foot and calf packs.

2. Intestinal abscesses occur in various infectious diseases, particularly in diphtheria, cholera, typhoid fever, smallpox, puerperal fever as also subsequent to mercurial poisoning. In these diseases the abscesses have their seat chiefly in the large intestine, and differ from the catarrhal intestinal abscesses in that they are more deeply seated and more liable to disintegration. The danger of the wall of the intestine being pierced is here considerable. These abscesses assume an especially malignant form if the diseases are not properly treated from the first, if the morbid matter is not exuded through the skin and the other organs of secretion, but driven by drugs into the interior of the body. Such abscesses are best healed by applying, without delay, an appropriate treatment in general of the original disease, as given under the various headings in this book. Local treatment, which is given for catarrhal intestinal abscesses, must be applied co-ordinately in these as in all sorts of intestinal abscesses.

3. **Tuberculous Abscesses in the Intestines.** Tubercles are not, by any means, confined to the lungs, but may attack almost all the organs of the human body, including the intestines, and, in point of fact, do so in the form of abscesses. This kind of intestinal abscess is chiefly found in the small intestine, and it generally attacks the follicle. In this manner the nourishment of the patient is interfered with, as important parts of the organs of digestion are incapacitated. Moreover, diarrhœa—so deadly to consumptives, and by which the strength of the sufferer is completely exhausted—is caused by these abscesses.

Here recourse must be had to a general treatment. Further be it mentioned that stimulating abdominal compresses (86°) act very beneficially.

4. **Intestinal Abscesses of a Syphilitic Nature** have been found almost exclusively in females, and have their seat in the rectum. We infer, therefore, and probably correctly, that the infectious poisonous secretion flows from the vagina into the rectum. The treatment at first must, of course, be a general one, as given under syphilis. In addition, enemata—a pint and a half—(82° to 86°) every morning and evening. Hip-bath daily (77°) for twenty-five minutes, and T pack at night. For Modes of Application, see Index.

INTESTINES, CANCER OF THE. Ulcers may occur in the intestine just in the same manner as they develop in the stomach, and are found in the colon, the small intestine, the duodenum, and the rectum. It, however, chiefly occurs at the bend of the colon and where its connection begins with the rectum, and rarely originates in the small intestine and duodenum. It occurs generally with people above the age of forty.

SYMPTOMS.—Periodically a violent burning pain starting from the roundish hard tumor or the ulcer, the cause of which is probably that excrement or gases exercise a corrosive effect upon the raw and shrunk or narrowed place in the intestine. Constipation and vomiting ensue, the skin is flaccid and yellowish. If the disease lasts a long time, total collapse and decay supervene. The most frequently occurring forms of it are:

1. **Cancer of the Colon.** The tumor or ulcer lies near the edge of the ribs, near the left iliac spine. The tumor impedes the passing of excrement, and causes first an enlargement, and afterward a perforation of the intestine.

2. **Cancer of the Rectum.** The hard, roundish, thick tumor, intergrowing with its surrounding parts, is only a few inches distant from the anus, and can, therefore, easily be reached with the finger. The anus is open and studded with varicose veins. The discharge consists of ichor and blood. There is pain in the pelvis at first, which afterward spreads in every direction, and grows more intense; there is constipation and often involuntary stools, and a fatal termination is unfortunately not infrequent.

3. **Cancer of the Small Intestine.** It is a little more difficult to recognize this form of cancer. The tumor is more in the umbilical and abdominal regions.

4. **Cancer of the Duodenum** is hard to distinguish from that of the pylorus. The tumor lies between the upper abdominal region on the right-hand side and the navel. A distention of the stomach not infrequently takes place. A few hours after a meal vomiting of half-digested

food follows, occasionally brown in color and mingled with blood. Obstinate, troublesome constipation, pains in the stomach, and jaundice supervene.

TREATMENT—Is the same in all four forms; easily digestible, non-stimulating vegetarian diet. Food causing flatulence should be strictly avoided, and at meals only just sufficient food, to appease pressing hunger, should be taken. In particular, a regenerative treatment should be adopted, during which, however, small quantites of water or milk should be taken. Daily, or every other day, a lukewarm (72° to 86°) stimulating full pack, or a steam-bath in bed with extra compresses or steam-compresses on the affected place to be applied; besides, these soothing compresses should always be worn on the affected parts in bed. Frequent full enemata (86°) and plenty of fresh air.

For alleviating pain, steam-compresses and hip steam-baths. If these applications do not effect an improvement within a reasonable time, it is a sign of the malignant character of the abscess (malignant swelling is one which has a tendency to grow and to spread uninterruptedly if not arrested), and no delay should be made in securing the services of a skilful operator.

KNEIPP CURE.—Twice a week, hay-flower shirt and shallow bath; twice a week, hip-bath and a wash-down in bed. For Modes of Application, see Index. See also "CANCER."

Intestines, see Index.

Intestine, see "CHEST AND ABDOMEN, ORGANS OF THE."

INTESTINE, LARGE. This is the name given to the portion of the intestinal canal, situated beneath the valve of the cœcum. See also "CHEST AND ABDOMINAL CAVITY, ORGANS OF THE."

INTESTINE, SMALL, is the upper portion of the intestinal canal, extending to the valve of the cœcum. See "CHEST AND ABDOMINAL CŒCUM CAVITY, ORGANS OF THE."

Intestines, Rumbling Noises in the, see "FLATULENCE."

Institutions, Conducted on the Principles of the Natural Method of Healing, see Index.

Intoxication, see "DIPSOMANIA" and "RESULTS OF EXCESSIVE DRINKING."

Intoxicating Drinks, see "DIPSOMANIA."

Invalid's Diet, see "DIET, NON-STIMULATING."

INVALIDS, How to Change Bed Linen of. Fig. 221 shows, how bed-ridden patients must be lifted, in order to move them from one bed

into another. For further particulars see "SICK-BED," and "SICK, CARE OF THE."

Invigorating Applications, see Index

Involuntary Loss of Semen, see "SEMEN, EMISSION OF"

IODISM mostly degenerates into a chronic wasting sickness and arises from taking large doses of iodine in medicine

SYMPTOMS —Increased nervousness, oppressed respiration, palpitation of the heart, headache, vertigo, trembling, sleeplessness, cutaneous eruptions or the reverse, *viz*, depressed cutaneous action Also inflammatory condition of the interior of the mouth, nose, eyes, loss of appetite, disordered stomach, etc

TREATMENT —Strengthening and—in obstinate cases—regenerative treatment In acute cases of poisoning the attempt must at once be made to produce vomiting by tickling the inside of the throat with a feather or inserting a finger in it, and then quickly giving some paste, made of starch flour, or flour and water, in order to render the poison innocuous in the stomach

For Modes of Application, see Index, and see also "POISONING"

KNEIPP CURE —Short wrap twice a week, hip bath twice, shallow bath twice, hip douche and abdominal douche each twice a week

How to change bed linen of Invalids



Fig. 221.

Irregularities of Child-Birth, see Index.

Ischias, see "SCIATICA."

Itch, see "MANGE," "SCABIES," and "SKIN DISEASES."

J.

JAEGER'S SYSTEM OF CLOTHING, invented by Professor Dr. *Gustav Jaeger* of Stuttgart, aims at a complete reform in dress, bed clothes, and diet. Professor *Jaeger* discards everything but wool in his so-called "rational system of clothing," and is an avowed opponent of allopathic medicines, and, although favoring homeopathy, he chiefly relies on cutaneous action for health and the cure of disease; therefore, we may greet him as an ally in our struggle against drugs and potions whether prescribed by the faculty or by quacks.

JAUNDICE arises principally from accumulation of bile, some of its constituent parts passing into the blood vessels and lymphatic ducts; also from diseases of the liver, etc.; or from irritation of the liver, caused by mental disturbance, anger, or vexation, and the like; moreover from tight lacing, or tight fastening of any garment; or, in the case of infants, from the umbilical cord bandage being too tight. It is well known that about two pints of gall are, in a healthy subject, carried daily into the intestines as a means of digestion and of removing digested matter. When, in consequence of the above diseases or mischances, the biliary ducts are closed, a great part of the bile overflows the blood vessels and lymphatic ducts, and causes jaundice; the disease is rather serious (notwithstanding that it is often held not to be dangerous), as the bile not only fails to fulfil its purpose in the intestines, but creates disturbances in the blood, and in every organ, into which it intrudes.

There are two forms of jaundice:—(1) That which is caused by bile passing from the liver into the blood, and (2) a form of jaundice, independent of the liver, and which is produced in the blood by the resolution of the blood corpuscles and the change of the red particles thus set free into matter of the same color as the bile.

This kind of jaundice is a severe disease. The stools in this are of a dark color, the epidermis and the mucous membrane are very yellow, and the urine is tinged slightly with the same color.

Jaundice in new-born infants, especially those who are weakly, owing to premature birth, is due—according to some authorities—to the hepatic

(or liver) vein becoming suddenly void of blood, through the tying of the umbilical cord, and absorbing, therefore, the accumulated bile. According to others, it arises from the capillary vessels parting with, letting or forcing out, rejecting, the red corpuscles extravasating hemoglobin, which then undergo some change. Frequently, however, the reason is, as already mentioned, that the umbilical cord has been tied too tightly. Some kinds of jaundice pass off quickly and cure themselves; but that of new-born children, originating in diseases of the navel, must be considered serious.

Usual Symptoms.—Feeling of repletion, pressure, and tension in the stomach, sickness and vomiting, thirst, difficulty of digestion, flatulence, accumulation of mucus, loss of appetite, dislike to meat, furred tongue. After a few days the skin turns yellow, which will be first noticeable in the white of the eye; later, slow pulse; perspiration, staining the linen yellow; red or brownish colored urine; emaciation; violent pain in the region of the liver, if gall stones are the cause of the jaundice. With new-born children unusual sleepiness will be a symptom.

Treatment.—Avoiding the causes, in the first place; next, entirely non-irritating, sparing, easily digested food, excluding meat, fat, eggs; plenty of fresh air, sleeping with a window open; from two to four abdominal compresses daily (72° to 81°), each to remain on for two to three hours; besides, other mildly stimulating treatment of the skin, as one or two thorough (72°) rubbings of the whole body with wet towel wrung out, or a lukewarm (90°) bath. Bowels to be kept regular by enemata. Steam-baths in bed or steam-baths (about three a week) may likewise be taken for some time; the latter followed by a full pack, and both by a 90° bath or (72°) thorough wet rubbing, as above. In more severe cases, strengthening treatment. If gall-stones exist, plenty of water should be drunk. Moreover, if inflammatory symptoms are present, lukewarm (72° to 77°) compresses, on the region of the liver, to be changed according to the feeling of the patient.

A trial should also be made, by rubbing the lower ribs on the right side in the direction of the navel, in order to move the gall-stones. Especially should this be done in tepid (72° to 77°) hip baths. Steam-baths as above should also be taken in this case.

Instead of the daily treatment above indicated, the following may be applied: A lukewarm (82°) full pack daily (lasting from one to two hours), and then a 90° bath. Further, 77° to 82° abdominal compresses, kept on from an hour to an hour and a half, and 72° calf packs. For the rest, see above.

The treatment of new-born children consists in one or several small

lukewarm (86°) abdominal compresses, with succeeding warm (92°) bath; and, above all, in avoiding the causes of the complaint. For Modes of Application, see Index.

TREATMENT BY MASSAGE—Consists here in gently stroking and kneading the region of the liver in the direction of the stomach. It is best, however, to have it performed, in this disease, by an expert hand.

JAUNDICE CURED.

By Dr. TRALL.

Mrs. *White* of Key West, forty-three years of age, was attacked by jaundice, after having suffered from biliary and miasmatic complaints. Her skin was highly discolored, pale yellow in appearance, and very patchy. She improved in health very quickly, and, after a month's stay in my sanatorium, her skin had regained a relatively clear and healthy color.

Jaw, Contraction of Muscles of, see "LOCK JAW."

Jet Baths, see Index.

JOINTS, INFLAMMATION OF THE, may occur as a consequence of such mechanical injuries, as dislocations, sprains, blows, falls, etc.; or result from certain diseases.

TREATMENT.—Although the affections, last above referred to, must be treated according to the disease from which they spring, it is well to apply cooling, soothing compresses when pain and swelling suddenly set in; and afterward stimulating local compresses. See also Modes of Application and "PAIN, ALLEVIATION OF." Inflammation of the joints will also yield quickly to massage treatment, if no matter has formed; the massage being preceded by a cooling treatment. If massage be at once liberally applied to the injured joint, there may be no inflammation. But often, when the inflammation and swelling are already well established, one must at first apply massage to the adjoining tissues only, before handling the inflamed or swollen part. If the inflammation is of a very violent nature, massage must, for the first few days, be performed very gently. (See also "KNEE JOINT, DISEASES OF THE.")

JOINTS, STRAIN OF, AND TWISTING THE FOOT. In these, the articular surfaces are forcibly separated for a time, whereby the ligaments are stretched or torn. If the latter be the case, violent pains ensue. The extravasated blood is gradually re-absorbed by nature.

TREATMENT.—In the first place, rest the injured limbs, and apply cool or cold compresses, which must be changed on getting warm. They must be continued for a long time if the pains are violent and injuries severe, or the limb may be kept in cool or cold water for some length of

time; cold water may also be poured over the limb, and massage, rubbing, and stroking, applied simultaneously to the limb and the surrounding parts, as far as the pains permit. Afterward, put on cold or cool compresses. If, after the lapse of about an hour, a continuation of this treatment is still necessary, an interval is allowed to elapse, during which the compresses are put on.

The cold of the water penetrates to the innermost part of the injured limb, and serves to contract, invigorate, and strengthen, whilst rubbing and stroking promote absorption and prevent congestion. See also Group XII of "CURATIVE GYMNASTICS." Further treatment by massage, see "JOINTS, INFLAMMATION OF THE," and "SPRAINS" in "BAD HEALTH." For Modes of Application, see Index.

JOURNALS for Popular Hygiene and Natural Method of Healing are published in Germany in great numbers, *e. g.*, Der Naturarzt, Zeitschrift des deutschen Bundes der Naturheilvereine (Berlin); *Bilz*, Gesundheitsrat (*Bilz*, Leipsic); Oesterreichischer Gesundheitsrat (*Bilz*, Leipsic; and *Dietl*, Kaiserstrasse, Vienna); Wörishofer Blätter (Munich); Gesundheitsblätter (Leipsic); Gesundheitsrat (Stuttgart); Amerikanische Kneipp-Blätter and Kneipp Water Cure Monthly (111 East 59th Street, New York), etc.

Many of the cures reported in this book have been copied from these periodicals.

K.

Kidneys, Chronic Affections of, see "BAD HEALTH."

KIDNEYS, DISEASE OF THE, (Pyelitis). In this disease the mucous membrane of the pelvis of the kidneys and of the chalice are inflamed. It appears in an acute and chronic form.

SYMPTOMS OF THE ACUTE FORM.—Violent fever, pains in the region of the kidneys, painful desire to pass urine, which contains blood, pus, and albumen. Secretion of mucus and desquamation of the epidermis of the mucous membrane of the pelvis of the kidneys, vomiting, etc.

SYMPTOMS OF THE CHRONIC FORM—Which is generally preceded by the acute form—are, profuse secretion of matter, frequent desire to pass urine, which is cloudy, and the sediment of which contains matter. Feeling of cold and pain in the region of the loins; loss of strength.

CAUSES.—Irritation of the mucous membrane, caused by stone or pieces of stone in the kidney; inflammation of the neighboring parts as *Bright's* disease, disease of the kidneys, typhoid fever, scarlet fever, stone in the bladder, chill, retention of the urine, etc.

Treatment.—In cases of fever, soothing lukewarm (82°) full or three-quarter packs, or steam-bath in bed, with very wet compresses in the region of the kidneys. If necessary, a hot-water bottle, wrapped in a wet towel, should be placed to the feet during the packing. A wet rubbing of the whole body must then follow, and from one to three abdominal compresses applied in the day-time, according to the degree of inflammation. If possible, a hip bath with a hot-water bottle to the feet; while in the bath the region of the kidneys should be gently stroked and rubbed with a circular movement.

At night, stimulating trunk and calf packs; the first, with extra compresses on the region of the kidneys.

These stimulating packs are to be repeated in the day-time as well, and are to be changed on becoming irksome. Fresh air, non-stimulating diet, and enemata. For Modes of Application, see Index. For reports of cure, see under "Kidneys, Inflammation of the."

KIDNEY, ATROPHY OF THE. This disease is often the consequence of chronic inflammation of the kidneys. The kidney is hard and tough, dark red, occasionally pale yellow in color, and the capsule is difficult to detach. The cells of the kidneys, which are concerned in the filtration of urine, are much reduced in number, whereas the connective tissue between the cells is increased.

Symptoms.—Palpitation of the heart, difficulty in breathing, dropsical swelling of the body (the latter symptom, however, is sometimes absent), inflammation of the retina of the eye is sometimes observed. The urine is more copious than in acute and chronic inflammation of the kidneys, but contains less albumen.

Treatment.—See "Kidneys, Inflammation of the."

KIDNEYS, CANCER OF, may be confined to one, but extends sometimes to the other kidney. A knob-like, hard, immovable swelling is displayed externally in the region of the kidneys, and pains in the loins, as well as occasional hemorrhage (in which, however, the urine remains unclouded, and does not turn turbid, as in nephritis), and wasting, resulting from cancer.

It generally appears late in life—after the age of fifty.

Treatment.—As long as there is a discharge of blood, cooling (66°) compresses are to be put on the region of the kidneys; 82° to 86° hip baths are also beneficial, one or two a day (duration, fifteen minutes). Also a partial steam-bath of twenty minutes' duration, succeeded by a bath (90°), is advisable. See also "Cancer." For Modes of Application, see Index.

KIDNEY, FLOATING. This arises from a relaxed condition of the abdominal integuments, or from distension of the tissues and vessels, in

which the kidneys are imbedded. It is generally the right kidney which is affected. The abdominal integuments are unable to offer a sufficiently firm support to the intestines, and their relaxed condition often causes other abdominal organs to shift their position.

TREATMENT.—Trunk baths; short, cold hip baths; local massage; daily wet rubbing of the whole body for a short time with cool water, or cool baths of short duration; massage of the whole body; light diet; plenty of fresh air; curative gymnastics for the abdomen. In many cases a well-fitting bandage may be worn with benefit, in addition to the above-mentioned treatment. For further information concerning "MASSAGE" and "GYMNASTICS, CURATIVE," and for Modes of Application, see Index.

KIDNEY, HEMORRHAGE OF THE, arises in consequence of inflammation, hyperæmia, or cancer of the kidneys, typhus, scurvy, and also from faulty formation of the blood, rupture of congested blood vessels, and congestion. It may also be directly caused by injuries.

SYMPTOMS.—More or less blood in the urine, scalding pain in the bladder, pain in the region of the bladder and kidneys, etc.

TREATMENT.—Removal of the cause if possible; cooling and soothing compresses over the region of the kidneys, to be changed as the comfort of the patient may require.

At night, a stimulating foot and abdominal pack, with extra compresses over the kidneys, to be changed when troublesome to the patient. One or two lukewarm hip baths (77°) of fifteen minutes' duration every day. A hot-water bottle should be applied to the feet while taking these baths.

Half or three-quarter steam-baths in bed, with extra compresses on the region of the kidneys and bladder, followed by lukewarm baths (89°), may also be recommended. Also rest, non-stimulating diet, fresh air, and enemata. For Modes of Application, see Index.

CURE OF HEMORRHAGE OF THE KIDNEYS.

By H. CANITZ, Berlin, Natural Healer.

I was called in by the family of *M. H.*, 32 Klosterstrasse, Chemnitz, as Mrs. *H.* was dangerously ill. She had been suffering for about five weeks from violent hemorrhage of the kidneys. The doctor, who had attended her, had employed his well-known knowledge and skill, but with no result. In spite of all the efforts of the orthodox medical science, the disease continued and grew more intense every day. The application of bags of ice over the kidneys (probably with the object of producing contraction of the bleeding vessels of the kidneys by the influence of cold) only increased the trouble to such an extent that the worst was feared.

Small lumps of ice, and iced Seltzer water were administered, in the belief that the application of cold to the stomach would stop the hemorrhage in the kidneys, and the stomach had become so upset by large quantities of medicine, that every attempt to take nourishment was followed by nausea. The appetite was entirely gone, the hemorrhage continued, sleep was persistently absent, and the patient so exhausted that she was on the point of death. I found her in this condition, more dead than alive.

Nevertheless, she was restored to health in a comparatively short time, and how? The principle of steam-heat was applied with the most brilliant success. The ice and medicine treatment was discarded at once. For not only was the physical action of cold, *viz.*, contraction, not at all calculated to promote a cure in this case, inasmuch as it had a paralyzing effect on the nerves, blood vessels and tissues, but, owing to the constant application of cold, all warmth had been drawn from the body; the extremities and the parts where the ice had been laid being perfectly cold. In place of this treatment, steam compresses were applied to the trunk, with special compresses over the region of the kidneys, to act directly on the nerves; accompanied by compresses on the legs, with stimulating foot steam-baths in bed, to set up a derivative action, and the patient immediately began to improve. Her recovery was interrupted, on the second day of the treatment, by a severe pain in the left side, with difficulty in breathing; this, however, was soon removed by compresses and hot-water bottles, and from that time her progress was steady, ending in complete recovery. The hemorrhage subsided in a few days, the digestion gradually became normal, and the patient recovered her lost strength. She left her bed and her room in good health and spirits, and became a faithful adherent of the Natural Method of Healing.

KIDNEY, HYPERÆMIA OF THE, arises from increased influx of arterial or impeded efflux of venous blood; in other words, from congestion.

SYMPTOMS.—Copious secretion of urine; in some cases, however, the secretion is impaired, and the urine is then diminished in quantity, and contains more or less blood and albumen. There is little or no pain at first, but the disease is afterward attended by violent pain and feeling of pressure in the region of the loins; the tissues of the kidneys are swollen, soft, and liable to rupture from influx of blood; in congestion, on the other hand, the substance of the kidney is apt to become firm and hard.

CAUSES.—Irritating action of medicines on the kidneys, heart complaint, various diseases such as typhus, scarlet fever, measles, cholera, intermittent fever, pregnancy, paralysis, etc.

Treatment.—Removal, as far as possible, of the cause. A stimulating full or three-quarter pack to be applied daily or every other day, with extra cooling compresses over the region of the kidneys and bladder, followed by a lukewarm bath, 86° to 89°. At night, stimulating foot or leg packs and trunk or chest packs, the latter reaching to the navel, together with cooling or soothing compresses over the region of the kidneys, changed as the comfort of the patient may require. In the morning wet rubbing of the whole body, followed by vigorous rubbing till dry. Rest, fresh air, non-stimulating diet, and enemata. For Modes of Application, see Index.

KIDNEYS, INFLAMMATION OF (Nephritis). This affects either the kidneys themselves or their tissues, or the capsules enveloping the kidneys, and extends more frequently to one than to both; it appears in the acute form, but also imperceptibly in a chronic one.

Symptoms.—High fever with cold shivers, violent pains in the region of the kidneys even as far as the bladder and the legs; considerable swelling of the kidneys, vomiting, excessive thirst, disordered digestion, excessive micturition accompanied by blood, pus, albumen and adipose matter.

Causes.—Shock caused by a blow, pressure, etc. Taking much medicine, especially sudorific, diuretic remedies, and other laxatives. Also communication of inflammation from adjoining parts to the kidneys.

Treatment.—See "Pyelitis." In obstinate chronic cases a strengthening treatment is to be adopted. See also "Kidneys, Diseases of the." under Kneipp cure.

CURE OF VARIOUS DISEASES.

By the application of the Natural Method of Healing I have met with most remarkable success in my family. Mr. *Sperling* has, in the course of a few years, cured inflammation of the kidneys, bladder and lungs, nervous fever, affection of the glands, fistula of the rectum and carbuncles. I have involuntarily arrived at the conviction that a man is very badly off indeed who has to trust to a medical man with his physic. Within the space of a few years two of my boys fell ill with nervous fever; both were treated by doctors, both took medicine and both died, whereas from diseases at least as severe treated by the natural method, I have, thank God, not a single death to lament. Nor have I, since we have practised this method had one single moment of serious disease in my family.

May the few words I have here uttered fall upon fertile soil and contribute to the advancement of the Natural Method of Healing.

Berlin, Unterwasserstr. 9, I. *Friedrich Wegener.*

For other reports of cure, see under "Bright's Disease" and "Dropsy."

KIDNEY DISEASE AND INFLAMMATION OF THE ABDOMEN CURED.

By Herr Malten, Natural Healer.

For three years I had been periodically extremely unwell and in the beginning of February of this year I became violently ill. The doctor pronounced my malady to be disorder of the bladder, and treated me in the usual manner, whereby I neither improved nor derived any alleviation of my pain. After three months I consulted another doctor who ascertained that I was suffering from disease of the kidneys. My condition was almost intolerable. In the course of the next two months violent cramps in the abdomen set in, which caused me severe pain for some hours every day. Finally I was treated solely with phenacetine, morphine and opium, in order to procure some rest. After suffering torments for four months, and after my nerves had become totally shattered, I went in the most miserable state that can be imagined to Mr. *Malten*. Every step caused me violent pain; the malady had taken hold of the entire abdomen, and I had before me the prospect of a serious operation.

To-day, after a treatment of four months carried out by Mr. *Malten,* with the greatest circumspection and consideration, I am in possession of perfect health. My general condition, my bodily strength and my spirits leave nothing to be desired. My nerves are completely soothed, and all bodily functions are those of a thoroughly healthy man.

During these four months my body has discharged unceasingly the morbid matter lodged in it in incredible quantities. The secretion from the kidneys (gravel) took place without any excessive pain, which, considering the usually extreme painfulness of this disease, must be considered a triumph of the Natural Method of Healing. I should here mention that I consider the success is in a large degree to be attributed to the prescribed diet I rigidly adhered to. I leave this place with the agreeable confidence that my malady has not been apparently cured by medicine, which only suppresses, nor by an operation, which merely removes the symptoms, but radically and internally by the newly acquired strength of the body and purification of the humors.

How heartily and cordially grateful I am to Mr. *Malten,* it hardly needs further words to express.

I can only recommend every sufferer, not only to show the necessary patience and perseverance, but also the necessary aptitude. Success is then certain.

Kneading, see Index.

Knee-Affusions, see Index.

KNEE-JOINT, DISEASES OF THE, (stiffening and crippling). Sprains very frequently occur in the knee-joint, inflammation with swelling, fungous disease, etc.

Inflammation of the joints often leaves behind a thickening of the knee-cap and the surrounding ligaments; and now and then enlargement of the surfaces of the joint. These changes of course impair the flexibility of the respective joints, which become stiff and immovable.

TREATMENT.—When the inflammation, if it should exist, has been allayed by soothing compresses, stimulating compresses should be applied continually. Next, steaming the knee, application of hot-water bottles under the knee and at the side, then cool affusion, and, above all, massage (after inflammation has subsided) in the form of pressing, rubbing and kneading; which acts favorably in connection with the local steam-bath; passive movements (*i. e.* movements of the joint by some one, while the patient lies or sits still), curative gymnastics, such as forward and backward knee-extension, downward movement, etc., to be applied particularly for stiffness in the knee-joint. For neuralgia in the thighs or shin bones the eleventh group of gymnastic exercises.

KNEIPP CURE.—Hay-flower wrap, followed by knee and thigh affusion. See also "MASSAGE" and "GYMNASTICS, CURATIVE," in Index.

TREATMENT WITH MASSAGE in chronic inflammation of the knee-joint as prescribed by Dr. *Neumann* is as follows:

The employment of massage at the proper time, *i. e.*, when there is no suppuration or fever, will consist in rubbing and stroking, to break up the products of the inflammation, and to effect their absorption; and in kneading the adjoining wasted muscles. With great patience and perseverance a cure may be completed even after a long time. The patient should not be deterred at the beginning from this method of cure by the pain caused by it, which will often be acute.

In the treatment of joint diseases one should never forget that the movements natural to the different joints, whether practised by the patient alone or with the aid of others, always more or less help out the treatment; and that a position of rest and inactivity, indulged too long and without obvious necessity, may do more harm than good.

Dr. *Reibmeyer* gives an illustration of the method of handling the limb in the treatment with massage of a lady affected with chronic inflammation of the knee-joint. He says in his book, "Technical Massage": "It is as difficult to describe the handling of limbs as it is to

represent it in diagram. It consists in vigorous circular friction with the hand, especially with the finger tips, alternating with vigorous "centripetal" strokes of the same, or of the other hand (Fig. 222). In going over small surfaces the first joint of the thumb is made use of in the same way. The limb is taken hold of with the fingers of the hand, or of both hands, and used as a point of support. The object of this grip being to disperse the morbid products of the inflammation amongst the surrounding healthy tissues; a beginning is always made at the outer edge



Fig. 222.

of the part affected, and it is a matter of indifference as to the direction in which to push the dispersed products, if the surrounding parts are in a healthy state. This direction may be a "centrifugal"*) one, if healthy tissue is situated near. But "centripetal" stroking must always conclude this massage by friction.

This kind of friction massage is not only applicable in chronic inflammation of the knee-joint, but in enlargements of long standing round the joints.

There are further, malformations of the legs,—such as permanent flexure of the knee-joint and false positions of the same, as, for instance,

*) "Centipetal" may be understood as *towards* the centre; "centrifugal" as away from the centre.

bandy legs. In this case the knee-joints are bent out, and the curved legs and thighs form together the figure O.

The latter affection generally dates from infancy, as a consequence of rickets, the bones of the legs, becoming soft from this disease, bend under the weight of the body, and cause children to waddle like ducks.

TREATMENT.—This must, first of all, be directed against the rickets. There is also a deformity called "knock-kneed," which, in weakly subjects, is caused during the early years of growth by continual standing—as in the case of blacksmiths, locksmiths, etc.—or by the lifting of heavy weights. In this case the knee-joint is bent inward, so that the legs assume something like the shape of the letter X.

This may be attributable to an undue development of the rounded ends of the thigh bones and to an excessive strain on the ligaments of the joint.

TREATMENT.—If the tendency to this malady is discovered in good time, it may often be arrested by substituting some other more sedentary occupation, and by avoiding the lifting of heavy weights. A regenerative treatment must be observed. See also remarks on affections of the knee-joints under "BAD HEALTH."

A CASE OF CURE OF DISEASE OF THE KNEE-JOINT.

By Dr. TRALL.

Mrs. *A. Peakes,* of Holme's Hole, aged twenty-two, lost the use of one of her legs in consequence of abdominal enlargement of the liver.

The muscles of the right leg were so relaxed as to cause the knee-pan to be moved an inch or more out of its place; and the slightest movement of the limb caused the most excruciating pain, followed frequently by fainting-fits. The Boston surgeons who were consulted misunderstood entirely the nature of the disease, ascribing it to mere muscular weakness, and, for the purpose of strengthening the muscles, they adopted a treatment which could not but destroy the last remnants of muscular strength. They applied heavy splints and bandages, in which they confined the affected leg from the toes to the hips, to the exclusion of every and any possible movement. They moreover invented a chair upon wheels, so arranged as to form a seat or couch, on which she could be raised or lowered and moved from place to place, without disturbing the leg. This treatment considerably aggravated the local weakness; and, by the use of this frightful and absurd machine, paralysis of the whole body was brought on. When she came to my sanatorium, she had

been for more than three months in this barbarous cage. For a whole month she hovered between life and death; the enlarged liver pressed upon her lungs, making respiration as difficult as in a violent attack of asthma. We gradually loosened the bandages; overcame constipation with enemata and coarse food; restored the action of the skin by means of wet rubbing with lukewarm water and dry rubbing; and reduced the swelling of the liver with steam compresses. A great improvement was visible in the course of the second month. In three or four months the lady began to walk; and in six months after the commencement of our treatment, she could walk in the streets of her native town as well as ever, and was so altered altogether that many of her closest acquaintances did not at first recognize her, and would scarcely believe their eyes when she greeted them with every appearance of perfect health.

INFLAMMATION AND ABSCESS OF THE KNEE CURED.

Early in March, my daughter, aged fourteen, suddenly became ill with a swollen leg, which caused her most violent pain. Dr. *N. N.*, who was called in pronounced the case to be one of inflammation of the knee-joint, and prescribed ice-compresses and painting of the knee with iodine. Her condition, however, became considerably worse and the doctor was of the opinion that an operation was necessary, and that the patient might have to be taken to the hospital. At the suggestions of several members of the *Society for Popular Hygiene,* we called in Mr. *Welcher,* of Frankfort-on-the-Main, a natural healer, who prescribed the following treatment. On account of the violent inflammation, soothing compresses, with not too cold water, were placed on the knee, and these were changed every few minutes. In addition, stimulating foot and abdominal packs and wet rubbing of the whole body. This change of treatment proved highly beneficial to the patient, though the pain in the knee was still considerable. When after two days the inflammation had somewhat subsided, a full-pack was given daily. In a few days steam compresses and the *Malten* steam apparatus could be used, which soon softened the terrible ulcer and made it discharge. In about ten days the knee opened of itself, as Mr. *Welcher* had prophesied, and on the same day a large quantity of blood and matter was discharged from it. The pains abated considerably, so that the patient, who had hardly closed an eye for weeks, fell into a deep sleep. The same treatment was continued for a time, except that the wound was syringed daily with lukewarm water and the leg massaged by an expert. In a few days a large number of abscesses, about the size of a bean, formed all over the leg, which discharged an immense quantity of blood and matter. One might say the whole leg was

one immense ulcer, and, on account of the frightful pain, had to be protected from pressure in bed by all sorts of devices. As the patient could no longer become thoroughly warm in the full pack, three or four steambaths in bed were applied, which thoroughly agreed with her. How serious her condition was may be gathered from the fact that a medical doctor, now a natural healer, who had an opportunity of seeing her, declared that, even if a cure were effected, the leg would, in all probability, be permanently stiff. However, God be praised, our exertions, and those of Mr. *Welcher* were richly rewarded, for the leg became better every day, and when the boils were partially healed, the leg, and, bit by bit, the whole body was massaged and curative gymnastics undertaken under the superintendence of Mr. *Welcher*. The leg then became more supple, and walking exercise could be attempted, so that Mr. *Welcher* was able to assure us that the leg would be perfectly normal. During the whole period of the treatment, the diet was strictly vegetarian, and consisted of gruel, light vegetables, fruit, etc. After being bedridden for seven weeks our daughter went into the country for a month, and in a fortnight she wrote: "I am well and cheerful, can jump and skip about like a deer, and no one can notice anything in my gait, nor have I any pain." Soon after her recovery our former doctor met our daughter. He was perfectly astonished, and said: "Yes, no doubt in some cases water is very effective."

For this success we have only the Natural Method of Healing to thank, and we hope that it will soon be introduced into every household.

The *Mueller* family, Offenbach, Herrenstrasse 1.

KNEIPP CURE. Who was Kneipp, the man who made his name so famous in recent years by his curative method? Kneipp was a Roman Catholic priest in Wörishofen, in Bavaria. He was born at Stefansried, in Bavaria, on the 17th of May, 1824, the son of a poor weaver. As a boy he displayed great natural intelligence, and was possessed with a yearning desire to study for holy orders; but his parents had not the means of giving him the necessary opportunities, and he was obliged to follow his father's trade. In the Introduction to his work, "My Water Cure," he describes his career in the following words:

"I was twenty-one years of age when I left home with my travelling permit in my pocket. The document described me as a weaver's apprentice; but on the tables of my heart had been graven, from the days of my childhood, a very different description. With pain unutterable, and a yearning desire for the fulfilment of my ideal, I had looked forward for long, long years to that departure. So I began my journey, hurrying from place to place, and seeking—not, as my friends hoped I should, to ply the weaver's shuttle, but—for some one who would be willing to help me

to study. The Reverend Chaplain *Merkle* interested himself in me, gave me private instruction for two years in succession, and prepared me with such an unwearied zeal for my examination that, at the end of the second year, I was received into a Gymnasium (High School). The work was not light, and, to all appearance, was destined to be fruitless. After five years of the greatest privations and efforts, I was broken in body and mind. My father fetched me away from the town, and the words of the landlord of the inn, at which we rested, are still ringing in my ears, "Weaver," said he to my father, "You are bringing your student home for the last time." The landlord was not alone in his opinion; it was shared by others. An army doctor of high repute at that time, who was also distinguished for his great benevolence and large-hearted kindness to poor patients, had visited me ninety times in the fourth year, and more than one hundred times in the last year, of that period of five years, so earnestly had he wished to be of use to me; but the progress of my illness had triumphed over his professional knowledge and his self-sacrificing humanity. I myself had given up hope, and looked forward with resignation to my end.

Chance placed in my hands a modest little volume. On opening it, I found that it treated of Hydropathy. I read its pages again and again; they contained what seemed incredible. The thought flashed upon me that at the eleventh hour I had found out my own condition. I read further; it was right; it agreed and harmonized with my own experience; it suited me to a hair. What joy! What comfort! New hope electrified the drooping body, and the yet more drooping spirit. The little volume was at first the straw to which I clung as a drowning man; it became in a short time the staff supporting the invalid; to-day it is the lifeboat which was sent to me by a merciful Providence in the nick of time, in the hour of extreme peril.

The little book, which treats of the healing power of cold water, is from the pen of a physician (Dr. *S. Hahn*). I tried the cure for three months; then for another three months; and, though unconscious of any decided improvement, I felt none the worse. This gave me courage. The winter of the year 1849 arrived, when I was once more in Dillingen. Two or three times a week I repaired to a secluded spot on the bank of the Danube, and took a plunge in the river. If I walked quickly to my bathing place, I walked home still more quickly to my warm room. These cold dips did me no harm; and, on the other hand, as it seemed to me, not much good. In the following year I was in the Georgianum, in Munich, where I found a poor student in worse case than I was myself. The physician of the establishment declined to give him the necessary certifi-

cate of health to entitle him to the benefits of the Institution, because—so ran the medical report—he would not live long. I now had a beloved colleague. I initiated him into the mysteries of my little book, and we two vied with each other in proving and practising its prescriptions. After a short time my friend obtained his desired certificate from the doctor; and he is still alive and well. I myself gained strength more and more; became a priest; and have followed my sacred vocation for thirty-six years. Friends flatter me by saying that they wonder now, when I am nearly fifty years older, at the power of my voice, and are astonished at my bodily strength. Water remained to me a tried and faithful friend. Who can blame me for proving myself a fast friend to it?"

The above is, in fact, a compendium of the history of the life of Father Kneipp; and, at the same time, the history of the origin of the "Kneipp Water Cure." As Kneipp himself says in his work, he does not in any degree claim to be the originator of a special method of cure. His method, critically considered, is only a branch of the modern combined Hygienic Treatment; he relies, according to his work, above quoted, chiefly on the cold water cure, as practised in his day by *Vincenz Priessnitz*, on the Gräfenberg, in Austrian Silesia. But to Kneipp belongs, undoubtedly, the merit of having directed the attention of mankind anew to a remedy which had almost passed into oblivion—that remedy being water.

The expression, "The Kneipp Cure," refers to the curative system carried out by Father Kneipp at Wörishofen, in Bavaria. From the Natural Method of Healing—which, as is known, employs only the natural healing factors, air, water, diet, etc.—Father Kneipp so far deviated, in his practice, as to prescribe the use internally of decoctions or infusions of such herbs and plants as appeared to him to have a therapeutic value, as well as of warm or steam-baths charged with the ingredients of plants.

These trifling deviations from the Natural Method of Healing pure and simple, have been sometimes criticised with undue severity by the disciples of that drug-denying method; but they do not in the least detract from the practical success of Kneipp's system. His patients are to be found in every rank and calling, from the princely landholder to his humblest subject. The very reverend gentleman, a priestly personage of a stalwart and vigorous type, attracted the favorable notice of the invalid public by his gentle and sympathetic manner when giving advice, and by the pains which he bestowed on the treatment of his patients, rich and poor alike. To those circumstances the flourishing progress of his method of healing may in no small degree be attributed.

Kneipp's theory is that the cause of all diseases lies in the blood—either from the fact of the blood being vitiated by the presence in it of morbid matter, or in the interruption of its normal circulation through the body—and he maintains that all morbid matter can be expelled by water. For the purposes of his cure he employs water in the form of wraps, compresses, packs, steamings, washings, and affusions. He holds that cold water is more effective than warm, and he ascribes to the other applications a subordinate importance only. The specialty of Kneipp's method is the shortness of the time during which the applications are continued—"cold and short" being the rule, especially for the affusions. He says, however, in his work, that not every patient can bear that rule of treatment; and in cases of such inability, he adopts our modified practice. Kneipp has many markedly successful cures to show as the results of treatment carried out under his experienced and watchful eye. The great attractive power of Wörishofen was due in the first place to Kneipp's personality, but in a great measure also to the Roman Catholic priesthood and their press. Physicians journeyed in great numbers to that town to study Kneipp's treatment on the spot; Kneipp hydropathic establishments sprang up like mushrooms out of the earth; yet Kneipp himself said that many and many a practitioner assumed the Kneipp title for himself and his establishment; and that few among them all were fit to hold it.

Kneipp's Affusion, Diagram for Application of, see Index.

KNEIPP'S DIAGNOSIS. As Father Kneipp never examined a patient by auscultation or percussion, and yet achieved such remarkable results in the cure of diseases, it is worth while to enquire how he arrived at his diagnoses, and arranged his plans of treatment.

1. His first look at a patient, which, owing to the number of sufferers whom he had to look at, was a very keen one—generally enabled him to form an opinion of the case. If the individuals were pale and thin, he concluded that their blood was poor and of bad quality, and that they lacked natural warmth. His first object then was to stimulate their appetite and circulation, which he accomplished for the most part by partial washings or affusions; local applications and packs being in such cases inappropriate. If the lack of natural warmth was very marked, cold applications were preceded by warm ones, such as steaming of that part of the body which was immediately afterward to receive a cold affusion. As a consequence of the improved appetite and circulation which followed that treatment, the supply of blood and natural warmth were increased, and the whole system was roused to greater action.

KNEIPP CURE.



Fig 1 The Knee jet



Fig 2 The Head-affusion



Fig 3 Walking barefoot in wet grass

EXPLANATION OF PLATE "KNEIPP CURE.'

FIGURE 1. The **KNEE AFFUSION.** Its application and action are fully described on pages 1688 and 1708. It is used especially in cases of congestion toward the head to draw the blood from the upper to the lower parts of the body. Persons who often use head steam-baths (see explanation to plate "Steam-Baths," Fig. 6) should also frequently apply the knee affusion in order to regulate the circulation of the blood. For cold feet, after a previously taken foot steam-bath (see explanation to plate "Steam-Baths," Figs. 3 and 4), the knee affusion is very effective to maintain the circulation of the blood in the feet. Its action is also especially diuretic in bladder and kidney diseases.

FIGURE 2. The **HEAD AFFUSION** is applied with success particularly in cases of eye, ear, nose and head affections. Its application and action are described in detail on page 1699. Above all it should not be neglected to carefully dry the hair after a head affusion.

FIGURE 3. **WALKING WITH BARE FEET IN WET GRASS** is, after the regular daily ablutions, the most simple and natural means of making the body hardy. Persons who suffer from congestion to the head, from eye, ear, throat and nose diseases can, with the best success, if the weather is not too cold, walk barefoot from 10 to 20 minutes.

2. In the case of corpulent persons, his attention was directed to augmenting the excretions; an object which must be pursued with caution if the heart of the patient is affected, as is frequently the case in corpulency in a greater or less degree. Although the physician rejects water entirely in cases of heart complaint, Kneipp was of a wholly opposite opinion. He said to himself: "A well-ordered circulation is beneficial to the sufferer from heart complaint, and that can only be attained by the proper employment of water. By knee, thigh and back affusions, for instance, the blood is drawn downward from the weak heart, which is thereby relieved. At the same time the warmth of the blood is better distributed, and the natural strength of the patient is increased, so that it becomes possible to proceed to upper, or even full affusions."

3. Out of every hundred persons ninety are nervous. There must, therefore, be gradations of treatment in every case. With most patients, the mild applications come first; a beginning being made with the feet; walking bare-footed in the house, or on the grass when the sun shines. In that way the circulation of the blood in the feet is enlivened, and it is then possible to proceed with the stronger applications. When nervous pains and spasms call for relief, warm applications are prescribed. In some diseases, pain may be actually caused by the first stages of the cure; but these are but signs of returning health, for it is not to be expected that a circulation which has been irregular for years can be brought into good order without a slight revolution, of which such pains are the best proof. In this way slight attacks of cough, or pain in the back, increase or cessation of the regular functions, may occur at the beginning of the cure. All such symptoms are, as a rule, so many proofs that the patient will certainly recover. Indeed, if they are altogether absent in chronic cases, the course of the cure is generally unsatisfactory, from the want in the patient of the reactive force required for the healing process. It is to be regretted that some invalids allow themselves to be frightened by these symptoms into changing their method of treatment for some other which removes them still farther from the desired goal of recovery. Upon such and similar natural and reasonable grounds Kneipp based his plans of treatment.

Sad to say, it was not permitted to the great Samaritan of Wörishofen to continue his work as long as—in the interests of the spread of his doctrine of the Natural Method of Healing, and of suffering humanity—could have been desired. A malignant malady, an insidious formation on the bladder, carried off the hale and vigorous old man in the course of six months. He died on the 17th of June, 1897, deeply mourned by the

many thousands whom he had succored, as well as by all the friends and followers of the natural healing art.

Honor to his memory!

Kneipp Cure. FUNDAMENTAL RULES.

The following are fundamental rules and maxims, which should be borne in mind in the application of the Kneipp affusions, baths, etc.

The shorter the application the better its effect.

The colder the water, the shorter must be the time of its employment; and the greater will the reaction be. Weak patients must, nevertheless, begin with water of a moderate temperature; at first 66°, cooler after a time, down to 59° and 55°, and at last quite cold. The body must be as warm as possible before the application of cold water. If there is a lack of natural warmth, the first applications must be warm.

There should be no drying of the body, by artificial means, after the use of water; but the clothes should be put on quickly, and, in order to help on reaction, exercise should be taken, rapid at first and slower by degrees. If there is no reaction, or if the patient is very weak, the warmth of bed should be sought.

Hardening the body is the best means of preserving the general health, and of protection against attacks of disease.

Kneipp Cure. Abdomen, Compresses on. See Index.

Kneipp Cure. ABDOMEN, SPASMS IN THE. Hay-seed (remnants of hay and grass), steeped in hot water, used for warm compresses and packs in combination with other resources of the natural method of healing, are a powerful and reliable means of relief. For abdominal complaints which are caused through obstruction of the kidneys by mucus, lime-blossom tea furnishes an excellent remedy. Decoction of peppermint or water mint, taken in warm milk, soothes pain. Rue tea, or rue (Ruta groveolens, L.) soaked in spirit, twice daily ten or twelve drops on sugar, or the same quantity of it in olive oil, answers the same purpose. The last mixture must stand in a warm place for some length of time.

Kneipp Cure. ABDOMEN, VIOLENT SPASMS IN THE. These yield to camomile tea. Such spasms are frequently nothing but the result of an accumulation of gases, and are accompanied by vomiting and cold hands and feet. In such cases an infusion of peppermint, water-mint, aniseed, or fennel—or a mixture of them all—will be of great service.

Besides taking camomile tea, the patient should, on the first day of attack, wash three times with warm water and vinegar; on the second day, twice, and afterward only once a day. Thus equable warmth and normal circulation of the blood will be re-established.

Kneipp Cure. ABDOMINAL COMPLAINTS. Warm foot baths daily, and corresponding hip-baths. A small cup of lime-blossom tea, or St. John's wort, mixed with that of yarrow, thrice daily.

Kneipp Cure. ABDOMINAL COMPLAINTS AND DEBILITATED CONDITION OF WOMEN. Three cold hip-baths a week, of one or two minutes' duration, and daily lavation—the patient getting out of bed for the purpose, and returning to bed afterward; hardening the body by wearing less thick clothing and walking bare-footed at times—these are the best preventive measures that can be adopted. If the patient suffers from fluor albus, rinsing the parts twice a day with a decoction of common pewter grass will be of great advantage. At night a four-fold cloth, dipped in vinegar and water, should be kept on the abdomen for two hours. A tea, of yarrow and St. John's wort mixed, has a good effect.

Kneipp Cure. Ablutions or Lavations. See Index.

Kneipp Cure. APOPLEXY, Paralysis of the Brain. The principal thing is to draw the blood from the head, which is done in the following manner: The patient is washed with two parts of water to one part vinegar twice daily, and, without being dried, is put into a warm bed. An abdominal pack, or foot pack, follows. For about the next four weeks the patient has a lavation only once a day with water and vinegar; but he has besides two thigh and two arm affusions daily. Then follow, upper thigh and back affusions in rotation, for from six to eight weeks. In order to support the continual increase of the bodily strength, the patient should go on taking, for a twelvemonth or so, one day back affusion, the next an upper and on the third a thigh affusion, and so on in rotation. If this treatment is persevered in, and a suitable and nourishing diet is observed, the patient will regain his former health.

It frequently happens, particularly with women, that giddiness, painful pressure on the head, with complete unconsciousness, are premonitory symptoms of an attack of apoplexy. The warm foot bath with ashes and salt is always the very first remedy to be applied in such cases; the hands should be washed with water and vinegar, and then follow, as above mentioned, two or three cold vinegar water lavations every day. As a final treatment partial baths should be taken in rotation with upper and thigh affusions for several weeks.

If paralysis of the brain should supervene in the case of a particularly corpulent person with a disproportionately thick neck and swollen head, who has suffered much from determination of blood to the head, a head steam-bath of fifteen or twenty minutes' duration, followed by a foot steam-bath, is the first thing to be applied. Lavations, such as indicated above, and afterward affusions, including full ones, may then follow in turn. During the first days the head and foot steam-bath will have to be repeated about three times a week.

In PULMONARY APOPLEXY, full lavations with water and vinegar, two or three times daily, and continued for a considerable time, are the best means of re-invigorating the weak lungs and the entire system. After three months the upper affusions, combined with thigh affusion and partial bath may perhaps be taken twice a week for some time; to put the recurrence of the trouble out of the question. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. APPETITE, LOSS OF. A full washing every morning on rising from bed. One tea-spoonful of Kneipp's stomach cordial, and some wormwood pills twice or thrice a day. Five drops of oil of spikenard, or lavender, on sugar. Plenty of walking exercise.

Kneipp Cure. Arm-Affusion. See Index.

Kneipp Cure. Arm and Hand Baths. See Index.

Kneipp Cure. ARTHRITIS. Rheumatism in the joints of limbs. This disease is generally connected with swelling of various parts, as hands, feet, shoulders. The patient has no appetite and cannot get sleep; is very feverish and perspires a great deal. In such a case he should wear for an hour and a half or two hours every day, a shirt steeped in an infusion of hay-seed; he should give himself daily one full washing,—or even two if the fever is high—and three upper and knee affusions a week, besides drinking every day a cup of the infusion of elder-blossoms, juniper berries, and common yarrow. He should continue this for four weeks, and then take as a tonic two half baths weekly, and submit to a juniper berry cure.

If the malady has occurred repeatedly, and if pain is connected with it, the following course should be adopted. A three-quarter pack twice a week, with a coarse cloth steeped in a warm decoction of oat-straw; duration, from one and a half to two hours; wash the body three times a week with water and vinegar, the patient leaving his bed for the purpose, and returning to it after the washing; wear twice a weak, for an hour and a

half, a shirt, dipped in a warm decoction of oat-straw, and take every day a cup of tea made of sage, wormwood and St. John's wort combined. After four weeks, the shirt should be worn only once a week for the time above prescribed, and one short, cold bath should be taken. Finally, after about six weeks, two half baths weekly should be taken as security against a relapse. It is likewise advisable for a patient to take daily a cup of primrose tea, made of the deep-yellow flowers, (Primula L.) for some length of time. This remedy soothes the pain and causes it gradually to disappear. (See also "RHEUMATISM" in Index and pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. ARTICULAR RHEUMATISM. Rheumatism in the joints. Cases will vary much in the degree of severity, for articular rheumatism is the result of many diseases. Various stomach complaints, and grave disorders of the kidneys often end in rheumatism of the joints, as the result of bungling medical treatment, and the patient so afflicted will have suffered much, and present a picture of misery. The morbid matter has penetrated into the marrow of his bones, and affected every limb. In such a case one should have recourse at once to warmth as a resolvent. A warm Spanish cloak, therefore, and head and foot steam-baths, but by no means too many applications, or in too quick succession, for such a patient, already weakened as he will have been by previous suffering, cannot have any great reserve of vital force, and the consideration of that fact must enter into the doctor's calculations. Wraps, and upper and lower affusions may then follow, but only one of these in a day; the patient should get out of bed every morning for a full washing, and then go back to bed to get warm again. The treatment thus continues for a month. During the fifth and sixth week the patient should take, in each, two half baths, a head and a foot steam-bath, and a Spanish cloak pack. Finally, warm bath alternately with cold and with upper and thigh or knee affusions; and, last of all two full washings, and one upper and thigh affusion should be taken weekly, with now and then a warm bath, in order that the blood, which has been so long, perhaps for years, clogged with impurities, may once more flow freely and be attracted to the outer surface of the skin, so as to render it more susceptible to the subsequent cold applications. The head steam-baths, however, are employed only when the hair has disappeared to a great extent, and when the pain, through the circulation of the blood, has extended to the upper parts, both of which eventualities may be expected in severe cases of rheumatism. If they do not occur, the head steam-bath should not be used, but the rest of the treatment above prescribed should be observed. The fol-

lowing is an instance of the disease in its lighter form: A man of otherwise sound and strong constitution was for twenty years afflicted with articular rheumatism, and had for a long time used steam-baths, taken large quantities of salicyl, and many salt-water baths, and finally had tried massage; but all without the desired effect. He had tried everything except cold water, against which he had been most strictly warned. After a time a rather severe eruption on the legs, and varicose veins, made their appearance. Washing the parts with bran-water, rubbing in of tar-soap, washings with hot water, and again rubbing in rice powder, were prescribed, in order to remove these complaints. For the varicose veins flannel bandages around the legs were used.

The treatment which cured him in eight weeks consisted in two or three applications daily: Upper and thigh affusions alternating with half baths, local steam-baths and full washings, etc. The patient had also to walk assiduously bare-footed; and so he became convinced that his disease could be simply cured by water. Unfortunately he had before been quite ignorant of the efficacy of water, was even a sworn enemy to it, and had avoided it in every way.

In his later years Kneipp treated this disease exclusively by cold applications, and with the best results. The patient, rising from his bed for the purpose, received a cold affusion on the painful joint, continued until the pain abated. He then went back to bed. When the pain became troublesome again, the process was repeated, and the repetitions were persevered with until the ailment was finally cured, which, even in acute cases, often happened within a few days.

Kneipp Cure. ASTHMA. Difficulty of breathing. Hundreds of asthmatic people have been restored to health by the Kneipp cure. An old man, aged 67, who had suffered with asthma for ten years, took a plunge in the river every morning for twelve months, remaining only five seconds in the water, and in the evening, when the asthma came on, a brief, cold, hip-bath. With these simple remedies, and the usual plain fare of a care-taker, he completely recovered his health. But it would have been restored more promptly if, after the first fortnight, he had applied affusions in the following order: Monday, upper and knee affusions, and in the evening a hip-bath; Tuesday, upper and thigh affusion, and evening hip-bath; Wednesday, back affusion and evening hip-bath; Thursday, upper and knee affusions, evening hip-bath; Friday, upper and thigh affusions, evening hip-bath; Saturday, back affusion, and evening hip-bath; Sunday, full washing, and in the evening a half bath. Strong subjects may take two full baths a week, and walk on wet grass every day.

Internally, tea of violet leaves, Kneipp's cough cordial, infusion of mullein, and beating with stinging-nettles are often used with good effect. As people afflicted with asthma are frequently troubled with cold feet, the first remedies recommended are warm foot-baths with salt and ashes, as well as washing of the upper part of the body; the next remedy is hip-baths, to be followed, after a fortnight's time, by the various affusions in turn. Most asthmatic persons are shy of cold water, and it is advisable, therefore, to order at first washing of the upper part of the body and foot-baths, in order to get the feet warm; full washing may come afterward. A short pack or wrap now and then, and walking bare-footed, at first in the room, should also be prescribed. Baron *v. Boeninghausen* relates an interesting cure of severe *pulmonary asthma*. He had contracted this trying complaint by taking cold; had an incipient catarrh—treated medically, and therefore only suppressed—caught a fresh cold, which brought on shivering fits, and from that time, May, 1889, dates his asthma of the lungs. He tried everything—hot baths in Wiesbaden, every imaginable remedy, baths in the German ocean, and a prolonged sojourn in the South at Nice. The accumulation of phlegm in his lungs was so enormous that the doctor declared he had never seen anything like it; medicine could do him no good. His strength failed him; breathing became difficult to him, and he was unable to do his work.

He then made up his mind to apply the Kneipp cure, in spite of all the doctors dissuading him from it; it was his last resort. Cough and oppression of the chest, after the first use of the affusions, deprived him of sleep. Even the rattle in the chest remained. He was attacked with violent shivering fits and fever; had severe, pricking pain in his right lung; with excessive, blood-stained expectoration. Kneipp now and then ordered quite hot packs, as well as cold ones, saturated with water and vinegar; and compresses of fenugreek and soft whey cheese. This treatment brought about his complete recovery. Perspiration set in, which threw off all kinds of vitiated matter. Expectoration became constantly less, and the asthma disappeared. Sleep and appetite have since then been very good, and the patient feels in better health than ever. He was soon able to walk for hours, morning and afternoon; but continued to take two affusions daily, as an additional source of strength. From four to six weeks sufficed for this miraculous cure; while for four long years previously no physician, no health resort, had been able to give relief to the sufferer, still less to restore him to health. What will his former medical advisers and professors say now?

Be it here observed that, in the practice of the water cure, the first few days' treatment will often be found to aggravate the symptoms for

a time; but this should by no means discourage the patient from persevering with the cure.

In asthma, steam may be applied to the feet instead of a bath, if the patient is troubled with cold feet.

The main principle of the treatment is the rapid production of heat. On the occurrence of spasms, which are so alarming and distressing to the sufferer, the back should be warmed by dry friction; and the whole body be washed afterward with vinegar and water (one-third of the former to two-thirds of the latter).

In bad cases a cloth, dipped in water as hot as the patient can bear it, should be applied to the throat and chest. If it cannot be borne on the chest, it may be applied to the back. Thus, during every attack, the rule is, warm applications, as warm as they can be borne. When the attack has passed off, cold affusions may be given; an upper (in rotation with a back) and a thigh affusion; two of the first to one of each of the others; because the first has the greatest effect in warming the body, which is here the main object. On every recurrence of the attacks, it will be well to use the hay-seed shirt twice in each week, warm. During the attacks—if possible, every half hour—a tablespoonful of a decoction of stinging nettles or blind nettles should be taken; at other times, a cupful daily. For Modes of Application, see Index.

Kneipp Cure. AURAL AFFECTIONS. Two head steam-baths within three days are, as a rule, the proper application in these cases, especially when they are connected with noises in the ears, discharge from them, and acute pain. The treatment should end with affusion behind the ears. For steaming ears the infusion of mallow blossoms is much recommended. If the ear is stopped up, syringing with warm water, about three times a day, will generally suffice to remove the obstruction. After the syringing, four or five drops of the oil of sweet almonds are dropped into the ear, which is then closed with cotton wool, against draughts and cold. Or the same quantity of oil may be dropped into each ear on alternate days, and the ear be syringed on the intervening day, with either lukewarm water or a decoction of pewter grass, cotton wool being inserted after such process. The week's course of water treatment should consist of two hip baths, two partial baths, two whole washings, and two short wraps at night. Good olive oil may be used instead of that of sweet almonds. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Automatic Douche. See Index.

Kneipp Cure. Back Affusion. See Index.

Kneipp Cure. BLADDER, AFFECTIONS OF THE. For catarrh of the bladder, steam-baths of pewter grass are the most effective remedy. For ulcers of the bladder, chair steam-baths, three times a week, are particularly efficacious. After the steam-bath a full washing is given; or washing of the upper body, or a half bath. Strong people may take a short and cold full bath. As a tea, an infusion of pewter grass is recommended; or Wülhuber No. 2, which may now be had at any chemist's. Care must be taken that the weaker the patient, the milder must be the hip or half bath, following the chair steam-bath. This should at first be of the temperature of 66° and 56°, afterward 60° and 56°; finally the half bath, quite cold. On the days when a steam-bath is not taken, a hip bath of 81° should be substituted, but only for five or ten minutes at first; each time it should be less warm and of shorter duration, till at last it should be quite cold, and last only a few seconds. The diet must be nutritious, but at first vegetarian; afterward mixed fare for dinner may be the rule. For complaints of the bladder and kidneys, Wülhuber tea No. 2 is useful. It acts directly on the affected organs and, at the same time, on the bowels; expels morbid matter with the urine, and is always advisable in cases of uneasiness in the region of the bladder, of pain during urination, and of scalding sensation in the bladder and kidneys. The tea consists of two tablespoonfuls of ground fennel, three of bruised juniper berries, three of powdered root of dwarf elder, one of fenugreek, and one of powdered aloes. A teaspoonful of this mixture suffices for a cup of tea, and weak persons will do well to distribute this one cup over two or three days, taking every evening from four to six tablespoonfuls. A tea of dried hips-and-haws, the insides of which have been taken out, will purify the kidneys and bladder, and dissolve gravel and stone. See also pp. 731, 735.

Kneipp Cure. BLADDER, GRAVEL AND STONE IN THE. This malady is generally treated by warm hip-baths of a decoction of pewter grass, and warm, lower packs steeped in a decoction of the same herb or of oat-straw. Cane-chair steam-baths; steaming with the vapor of pewter grass, and warm compresses on the affected parts are also applicable. Internally a tea of the same plant (which relieves the pain during urination) or of juniper berries, way-bread (plantain), dwarf-elder root, or hips-and-haws should be taken. Strawberries should be eaten in quantities by patients of this kind. A juniper-berry cure is also recommended. As a matter of course, cold washing must always follow upon full steam-baths and warm hip-baths.

Special Treatment.—A young man was treated for vesical calculus, and the doctors most urgently advocated an operation. A cloth, folded

several times and dipped in a decoction of common pewter grass, was laid on the painful place, and covered with a blanket. The patient had to drink, three times daily, a small cup of tea of juniper berries and pewter grass. The latter herb, scalded and still warm, was applied to the affected parts several times during the day; and after five weeks the stone was dissolved and came away in pieces. Tea of way-bread (plantain), one or two small cupfuls daily, has a great effect on this disease.

A man, upward of forty years of age, suffered for many years with this malady. The doctors declared it to be gravel and stone in the bladder. The pain, when the patient wanted to make water, was so great as to cause him to cry out. For a week he had oat-straw baths of 97° for half an hour, which were immediately followed by a cold half bath, or washing of the upper part of the body, for the space of one second. He drank—morning, noon, and evening—a cup of tea, made of hips-and-haws, pewter grass, and juniper berries. After a fortnight or so, the gravel began to dissolve; its discharge increased from day to day; and, with it, the terrible pain disappeared. In continuation of the treatment, the patient took weekly a warm bath, succeeded by a cold half bath and washing of the upper parts of the body; and drank frequently a cup of tea, prepared from the same fruit and herbs as before. He was thus restored to perfect health, and was never affected with the malady again. He was able, throughout the treatment, to adopt a mixed diet for dinner, with lighter, but nourishing fare in the evening. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. BLEEDING, VOMITING BLOOD. Decoction of pewter grass, one or two cupfuls daily, takes effect after a few minutes. In cases of violent bleeding from the nose, the tea is drawn up through it. A decoction of peppermint, prepared with vinegar, taken in spoonfuls now and then, arrests vomiting of blood; as does also an infusion of peppermint, mixed in equal quantities with pewter grass or sandal-wood. A decoction of mint, prepared with vinegar, is an excellent remedy for this complaint; one or two teaspoonfuls now and then. This is most effective in all cases of bleeding from the stomach.

Kneipp Cure. BLOOD, IRREGULARITIES IN THE CIRCULATION OF THE. Want of blood, or its sudden excitement, are remedied by an infusion of centaury.

Kneipp Cure. BLOOD POISONING may be cured, in its initial stage, by scalded hayseed—the stalks, leaves, blossoms, and seeds of hay, or freshly mown grass—in combination with other applications already mentioned, of the natural method of healing.

Kneipp Cure. BLOOD, PURIFICATION OF THE. Tea for purifying the blood. Strawberries with milk—one part of the former to two parts of the latter—in all, about a pint daily. In winter, preserved strawberries, or strawberry jam, may be used. Six or eight elderberry leaves, cut up like parsley, are boiled for about ten minutes, and a cup of the decoction is taken the first thing in the morning, an hour before breakfast, for as long as it is considered necessary. The dried leaves may also be used, as well as the blossoms and berries. The free use of nettles is likewise a good remedy for purifying the blood. The leaves should be boiled like spinach. An excellent tea for purifying the blood is made of a mixture of wormwood, sage, pewter grass, and sloe blossoms (in equal parts). A small cup to be taken in the morning before breakfast, and just before going to bed.

Kneipp Cure. BOILS. A Spanish cloak pack, every second day; and in rotation, in addition to the Spanish cloak, a half bath one day, and a whole washing the next. Fenugreek compresses on the boil itself; the herb being stewed to a pulp, spread on linen, and applied warm.

Kneipp Cure. BONE, SWELLING OF. (Caries.) Here also warm compresses of hayseed, or of fenugreek, or of curds, are the most efficacious remedy. Since in all conditions of this kind, the body is mostly feverish, the adjoining parts of the swelling are treated daily with a short, cold wrap; or a whole washing should be taken instead of the pack.

Kneipp Cure. BONE, ULCERS OF THE. These are cleansed twice daily, with the infusion of camomiles or pewter grass; and a plaster of prepared clay is put on afterward.

Kneipp Cure. Bowels, Constipation of the. See "Diarrhœa" and "Bladder and Kidneys, Affections of the."

Kneipp Cure. BOWEL, PROTRUSION OF THE. (Prolapsus.) The mucous membrane of the bowel will often protrude at the anus, as a result of long-continued diarrhœa—which has a very weakening effect—or of straining. In order to avoid inflammation and acute pain, with copious effusion of mucous matter, relief must, in most cases, be given by pressure; that is to say, the protrusion must be gradually and carefully pushed back within the splincter muscle of the orifice, by the fingers, previously well oiled, with or without the use of oiled rag or paper. A gen-

eral strengthening treatment will be required to effect a cure. Hip baths, with the decoction of oak bark or hay added to the water, syringing with water, or washing the parts, and enemata. A brew of mug-wort (artemisia), mullein, and wine should be made (by boiling the mixture), and the patient should sit in it as hot as he can bear it.

Kneipp Cure. **BOWELS, INFLAMMATION OF THE.** This ailment may be brought on by a chill, by obstruction of the bowel by hard fæces, by excessive physical exertion in riding or "wheeling," by worms, purgatives or by too active clysters, among other causes. The desire to relieve the bowels, pain, passing mucous matter tinged with blood, sweating, constipation, and the sensation of great weakness, are symptoms of this trouble. The treatment consists in clysters, packs, and hip baths. The diet should be confined to mucilaginous soups and milk.

Kneipp Cure. **BRAIN, ANÆMIA OF THE.** The upper affusion is an energetic and certain remedy for this complaint. The following curative gymnastic exercises are also recommended: Rolling the head (head circles); bending the body forward and backward; and arm movements, bending, rolling, and circling.

Kneipp Cure. **BRAIN, HYPERÆMIA OF THE.** Diligent perseverance in walking barefoot and treading in water. Knee and thigh affusions; hip baths. Abdominal pack or foot pack, at night.

Kneipp Cure. **BRAIN, INFLAMMATION OF THE SKIN OF THE. (Meningitis.)** Cool compresses, applied to the head. A half bath or a hip bath, in the morning; and a knee or thigh affusion, in the afternoon. At night, an abdominal pack and a foot pack.

Kneipp Cure. **BRAIN, INFLAMMATION OF THE SKIN OF THE.** If creeping pains in the head, with feverishness, and the inclination to vomit, are felt, and loss of consciousness, illusions and delirium supervene, inflammation of the brain is indicated. Full or three-quarter packs, or a long shirt, wrung out in cold vinegar and water (three parts water to one of vinegar) or in salt water, are prescribed. Two or three such cold packs, each lasting three-quarters of an hour, will generally suffice to reduce the temperature. A dry wrapping sheet or blanket will, of course, be used to envelop each wet pack, so as to prevent the escape of heat. Immediately after the pack, and while the patient is still warm, a full affusion may be given. Particular attention should be paid to the feet, which must be kept continually warm, by artificial means if necessary. The best means of insuring the required continuous warmth will be to

wrap the feet and legs, as high as the middle of the calves, in a quite hot cloth, wrung out in hot vinegar and water (one-third of vinegar to two-thirds of water); a mixture which should be boiled before use. Enemata must be given in case of constipation; and cool compresses should be applied to the head, and changed as they get warm. Internally, a tablespoonful of decoction of sloe leaves should be taken every half hour; or, failing the sloe leaves, a tablespoonful of water. The diet should be light, and easily digestible. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. BREAST, CANCER IN THE. Next to the object of ridding the blood of impurities, by which it is so much vitiated, the maintenance of the general strength of the patient must be kept in view as the aim of the treatment in this disease. During the cold months of the year, one of the forms of water application should be used daily; and in the summer, two.

For the winter the following may be the course:

First day, half bath; second day, upper affusion; third, thigh affusion; fourth, half bath; fifth, upper affusion; sixth, whole washing; seventh, back affusion; and so on, in the same order.

For the warmer months:

First day, half bath in the morning, and upper affusion in the evening; second day, thigh affusion in the morning, and washing of the upper part of the body in the evening; third day, back affusion and half bath; fourth day, upper affusion in the morning, and thigh affusions twice, afternoon and evening; fifth day, whole washing in the morning, and in the afternoon a half bath; sixth day, upper affusion in the morning, and thigh affusion in the afternoon; seventh day, back affusion and whole washing; and so on, repeating the course. If the patient is weakly, one application each day will suffice, at all times of the year.

Local treatment of three kinds may also be adopted. Every two hours a compress, well wrung out in a decoction of pewter grass, should be applied, not only over the diseased spot, but over the whole chest. As a change to this, soft curds, stirred till quite smooth, and spread on lint or linen, may be laid on the diseased spot and the surrounding parts, and allowed to remain until dry, when they should be renewed. These two forms of compress may be employed alternately, each for two days in succession. The third local remedy, which is strongly recommended, is a clay compress, or a compress wrung out in clay water. This should be used occasionally, especially in the second and third weeks. An ointment

should also be made of clay, mixed in a decoction of pewter grass and septfoil, and should be applied, spread on coarse linen as a plaster, to the wound. The plaster should be renewed as often as it dries. (See also pp. 734, 735.)

Kneipp Cure. BREATH, OFFENSIVE. Tea of peppermint in half of water, and half of wine, a cup of it taken daily for some days.

Kneipp Cure. BREATHING, DIFFICULTY OF. Accumulation of mucus may be cured, according to Father Kneipp's prescription, by tea of mullein, mixed half and half with black mallow. This dissolves the phlegm powerfully and enduringly; and it is also an effective remedy for gout. Rue (Ruta graveotens L.) is also an excellent remedy, either in the form of tea or as a liqueur. Ten to twelve drops of it, on sugar, may be taken twice a day; or the same quantity of infusion in salad oil. The latter mixture must stand for some time in a warm place. For difficulty of breathing, due to flatulence, two large or three small cups of violet-leaf tea daily, made by infusing a handful of the dried leaves in half a pint of water. A gargle or tea of mullein dissolves phlegm effectively, and still more so if made of mullein and mallow, half and half.

Kneipp Cure. Bright's (Renal) Disease. Lemon juice, among other things, is an excellent remedy. A patient affected with Bright's disease ate, as Dr. *Siebert* tells us, three hundred lemons in the space of three months, or three to four lemons daily; his urine was free from albumen, and he was discharged as cured. In southern countries, the lemon and lemon juice are a universal remedy among the people. Of course, suitable water treatment must be adopted. A short pack, with thigh or knee affusion, three times a week each; besides, two whole washings and two half baths in the week, a trunk steam-bath and an abdominal pack. A tea of knot grass, sage and dwarf-elder root. (See also pp. 734, 735.)

Kneipp Cure. BURGUNDY NOSE. (Lipoma.) Take two half baths, two hip baths, two knee and thigh affusions, every week; walk barefooted as much as possible; and apply abdominal compresses, or foot pack, at night.

Kneipp Cure. BURNS AND SCALDS. The best remedy is to apply fresh sauerkraut to the place; also clay, mixed with water, put on every half hour, has a similar effect.

Kneipp Cure. CANCER. When degeneration of the blood and other fluids of the body has taken place to a certain degree, this terrible disease, which poisons the whole body, frequently makes its appearance in the form of cancerous ulcer or glands. The ulcers may attack almost any

part of the body; and, especially under mistaken medical treatment, may become cancerous in the end. There is, therefore, cancer of the lips, tongue, liver, stomach, mammary glands, and of the intestines. Cure is possible only in those cases where the disease is as yet in its initial stage; and where, therefore, the vital force is not yet greatly reduced, and the fluids not yet too vitiated.

Cancer of the Lips may be either hard or soft. If it is hard, soft curd will be the most serviceable remedy to apply; but if the wound is open, a mixed powder of aloe and alum, six parts aloe to one part alum, should be sprinkled over it. By way of a change, the powdered aloe alone may be so used for a few days, and then powdered alum alone; afterward the mixed powder as before, in the proportions given above.

A man was suffering with cancer of the lips. The lower lip had already gone. Being as yet strong, the most vigorous applications could be employed. Knee, thigh, and head affusions, every day in turn. The sore place was well washed with aloe and alum water from three to five times a day, and a curd poultice was applied at night. Nearly perfect recovery followed after a few months' treatment.

Cancer of the Tongue. Another man had small, but very painful ulcers on the tongue. The doctors diagnosed cancer of the tongue. The patient had two lower and back affusions a week; his mouth was washed out daily three or four times with the infusion of pewter grass; and he had to put on a wet shirt for an hour and a half. When the shirt was taken off, a cold lavation was applied. The ulcers disappeared gradually, and the man's health improved visibly.

Cancer of the Intestine. It is far too little known, and the knowledge ought to be spread far more, that the waters of Karlsbad (Karlsbad salts), when drunk repeatedly and continuously for a length of time, are frequently the cause of the terrible disease—intestinal cancer. The momentary and transient improvement in the weak condition of the bowels induces the patient to repeat and to persevere with the cure. But the effect of the continuous use of the strong saline substances, contained in that water, is to destroy, in the long run, the interior surface of the mucous membrane; and the very opposite result is then manifested, to that which appeared at the beginning; that is to say, everything passes from the patient, because the action of the bowels has ceased. In the last stage of the disease there is rarely any help to be given; yet, upper, thigh and back affusions, in turn with hip and partial baths, are good remedies if it has not advanced too far. Full and lightning affusions may be given to patients with a strong constitution.

A Cancerous Tumor at the arm was treated very successfully with the use of partial baths; upper, back and thigh affusions; and the daily wearing of a shirt dipped in salt water. Fenugreek was put on the ulcer during the day; while the same herb, boiled to a mash, and later soft curds were applied to it at night. The diet in all these cases must be simple, with but little salt, and no other condiment whatever.

A Cancerous Ulcer may be cleansed with a solution of alum or with aloe water. Powdered aloe, mixed with charcoal, may likewise be sprinkled on it, with advantage. Kneipp's tea for purifying the blood should be taken several times a day.

A woman was affected with a cancerous gland at the breast, as large as a hen's egg; and a great deal of matter issued from it at times. The wound was washed with aloe water three times a day, and soft curds then applied to it. She took, besides, an upper and back affusion daily, and the Spanish cloak pack twice a week. The disease being as yet in its initial stage, the bad breast was cured in four months' time.—An *ointment from prepared clay* is also recommended for cancer. (See *ibid.* in Index. See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. CANCEROUS ULCERS, when not too far advanced, may be treated with alum, either powdered and sprinkled direct on the wound, or dissolved in water, and used as a wash, or for moistening small linen compresses, which are applied in the usual way. Powdered aloe, spread thickly over the ulcer once a day, and the whole covered with a dry bandage, absorbs the vicious matter, and helps to form a hard crust, under which new skin soon forms. See also "CARIES."

Kneipp Cure. CANCRUM ORIS. Inhale warm vapors charged with the fumes of yarrow, ribwort, or stinging nettles. Next, wash and rinse the mouth with cool water, and a little lemon juice added to it. Rinsing the mouth and gargling with a decoction of sage and pewter grass is recommended; but, above all, it is necessary to adopt a general treatment, in the form of wraps and full lavations.

Kneipp Cure. Cane-Chair Steam-Bath. See Index.

Kneipp Cure. CARIES. Occurs often in children who have bad blood and vitiated humors in their system. But it also occurs in adults, in connection with tuberculosis and syphilis, and with complaints of the liver, spleen, or kidneys. Its cure, if tuberculosis is the cause, is problematical. The object of the treatment must be to act upon the whole

body. Whole washings and wraps; and later, two half baths a week. For children, the chief consideration is good nourishment, blood-forming food, free of salt and other condiments. If a cure is at all possible. t can only be very slowly attained. All affected parts should be enveloped in compresses of fenugreek, pewter grass, oat straw, and hayseed; used in turn, and in such a manner that each suffering part has several applications every day. In addition to the compresses, four whole washings and two half baths will be advisable each week, so distributed that a half bath comes after two whole washings. This external treatment should be supported by the patient's taking daily about a small teaspoonful of white bone meal, which will promote the formating of new bone See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. CARIES, DISEASE OF BONES, is cured by common horse-tail, in its various forms of application; either as an infusion in washings, packs, compresses; or wrapping some of it in a wet cloth and putting it on the affected part; or, lastly, in the form of steam-baths. (See also "DECOCTION OF HORSE-TAIL.")

Kneipp Cure. CATARRH. The more effeminate we get in our habits, the more we are tormented with catarrhs of the most various kinds. The usual catarrh of the throat, connected with a cold in the nose, is often removed by a full lavation in the evening, and drinking elder blossom tea. If the head, too, is much involved in the affection, steam, applied to the head, is a valuable remedy.

Where the conditions occurring are of an obstinate catarrhal character, three things may be resorted to: First—a daily full lavation; secondly—a wrap, steeped in the infusion of hayseed; thirdly—also steam, applied to the head, since a neglected catarrh is apt to make an injurious inroad on any part of the body, so as to make it begin to waste, and thus gives rise to consumption of the larynx, trachea, and lungs. The deeper-seated and more inveterate a catarrh is, which has troubled the patient for months, the more searching and vigorous the water treatment must of necessity be. To the daily full lavations are then added three partial baths a week. Pulmonary catarrh of the lobes is cured most speedily by full lavation on getting out of bed, and one or two upper affusions a day. If the bronchial tubes and the larynx are attacked, upper and back affusions frequently save life by causing the discharge of great quantities of mucus. For intestinal and gastric catarrh see "INTESTINAL CATARRH" in Index. A teaspoonful of honey, boiled in half a pint of water, furnishes an excellent gargle, especially for singers. It may likewise be

made from mullein (Verbascum Schraderi Meyer), which acts as a vigorous solvent of mucus, and may be rendered still more effective by the addition of an equal quantity of black mallow. See "DIFFICULTY OF BREATHING"; also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. CATARRH, INTESTINAL. If violent diarrhœa is one of the symptoms, the water applications are, every week a short vinegar and water wrap, lasting about an hour and a half; besides, three or four compresses on the abdomen, likewise wetted with vinegar and water, and applied for the same length of time. Three small cupfuls of tea, made of wormwood, mixed with sage, centaury, yarrow, and St. John's wort, should be drunk daily; and six or eight juniper berries eaten. After a fortnight two half baths, with washing of the upper part of the body, are recommended, during the week; and twice in the week also the convalescent should get out of his bed at night, and wash the whole body quickly in cold water. After the third week, two cold, short half baths, or one half bath and one full washing, are taken weekly, in order to strengthen the abdomen and, indeed, the entire system. As these intestinal catarrhs occur mostly in spring and autumn, the best way to avoid the trouble, or the recurrence of it, is to harden the system against changes of weather.

Intestinal catarrh occurs frequently in connection with gastric catarrh. The consequences of such a malady, lasting for years, and, as a rule, treated wrongly, are often, liver complaints, asthma, throat affections, determination of blood to the head, and, finally, utter derangement of the nerves. There is, of course, a total loss of appetite; the bowels are in the most deplorable condition; and this sad state of things is frequently aggravated by a sedentary mode of life and mental strain. A patient in such a precarious state of health should every morning, an hour before it is time to dress, get up and give himself a "whole washing" with cold water, and then go back to bed. Every second day he should take for five seconds a cold half bath; and, finally, he should, two or three times a week, apply compresses, wrung out in vinegar and water (half and half), to the back, chest, and stomach at the same time, these compresses remaining on for an hour and a half. As a tea, he should take on alternate days a small cup of the infusion of elder flowers, or three spoonfuls of wormwood tea—morning, noon and evening. After four or five weeks of this treatment he will emerge from his previous state of illness, either entirely cured, or at least materially improved in health, and, after long years of sickness, will live anew. A simple nourishing diet, bodily exercise, and a weekly full washing or half bath, or both, will restore

his strength, and preserve him not only from relapses, but from other diseases. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. CHAPPED HANDS AND FEET. These small cracks, appearing on hands and feet, especially after a great change in the temperature, are cured most speedily if the affected parts are first wrapped for from half an hour to an hour in a warm compress of soaked hayseed and then dipped immediately into cold water for three minutes. As a strengthening measure, the dipping into cold water may be repeated some hours later. To sum up then: warm hayseed packs for thirty minutes once a day, and immersion of the chapped part in cold water for three minutes twice a day.

Kneipp Cure. CHEST, AFFECTION OF THE. A patient, cured of it, states: "I was hardly ever without pains in the chest. At one time I felt such a tightness that I was scarcely able to speak; at another I became hoarse, and utterance was painful to me. I generally had fever; and any change of temperature affected me most unpleasantly. On warm days I felt restless, on cold days I shivered; and in addition to this I was wearing too warm clothing, which, by its softening effect, was preparing further misery for me. In three weeks' time I was completely restored to health by the Kneipp cure. My body was rendered hardy, the affection in my chest, palpitation of the heart, and pricking pain in the sides left me entirely; and the loosened phlegm, got rid of in coughing, gave me positive proof that it was the quantity of matter accumulated in my chest which had not allowed me to get well." Kneipp's treatment was: walking bare-footed; four upper affusions, four thigh affusions, and three half-baths, in rotation, walking in water now and then in the evening for four minutes. Walking bare-footed, and walking in cold water, carried on for some length of time, are the two remedies that act with particularly favorable effect in all cases of inflammation of, and accumulation of mucus in the chest. In all such cases the mixed tea, mentioned under "PLEURITIS" may be taken. Eating a few juniper berries every day will be of advantage, as they dispel wind and assist the action of the kidneys.

The plan of treatment for patients affected with chest diseases—and their number is very great—is, for seven days, about as follows:

First day, upper affusion in the morning, thigh affusion in the afternoon. Second day, half-bath in the morning, and treading in water in the evening. Third day, like the first; fourth day, like the second; the fifth and seventh days like the first, and the sixth like the second. To walk bare-footed every day for a considerable time. This course should

be repeated week by week. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. CHLOROSIS. Green sickness. Nervousness and chlorosis, or anæmia, often go hand in hand. The first thing to do is to remove the cause, which, in many cases, is tight lacing, the wearing of stays, want of nutritious food, too little exercise out of doors, general weakening and softening of the system. If these causes can be effectually dealt with, a cure of the malady is soon made. The water applications should be gentle at first; in some cases, were cold feet are one of the symptoms, even warm foot-baths, with salt and wood ashes, and foot steam-baths, are recommended; with washing at first of the upper part of the body only, eventually full washing; standing in cold water for fifteen seconds, three times a week. After a few weeks, a half-bath may be taken every fourth day, with knee and upper affusions as the concluding stage of the course. The patient should go bare-footed in the house, and in the open air during summer and autumn. The hip-bath, too, taken twice a week, cold and short, is particularly recommended to all anæmic girls. Powdered chalk, or bone meal, should be taken internally in water, or vinegar and water, twice a day, morning and evening; a remedy which is greatly relished by such patients—a sign that it helps to make blood. Coffee, tea, beer and wine are as much to be eschewed as the wretched powdered iron, which ruins the stomach, and often also the teeth. Strengthening soup (not broth), easily digestible food, and malt coffee, should form the diet. Bodily exercise remains the principal thing, a sedentary mode of life being avoided. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. CHOLERA. As the Kneipp Cure has also achieved most splendid results in this terrible disease,—which, in a short space of time, weakens and destroys the strongest constitution,—a brief description of the mode of treatment is here given. The first thing is to produce *perspiration*. If that can be done, the patient is saved. A coarse cloth, folded several times, dipped in hot water and well wrung out, is laid as hot as possible on the stomach, and well covered up. In twenty minutes perspiration will generally take place. The cloth should then at once be again wrung out in hot water, and applied as before, in order to increase the perspiration. The whole body now perspires, the spasms cease, and the patient feels easier. The perspiration should be kept up for about an hour; the cloth is then taken away, but the patient will continue to perspire for some time. Should perspiration not set in after two compresses have been applied, the treatment must nevertheless be persevered in, till the desired result is obtained. The weakened constitution must

then be re-invigorated by three full washings daily; and when once the appetite returns, convalescence will speedily follow. But the attempt to restore warmth to the system must not be confined to external applications; internal remedies should also be employed, so that the process of destruction may be combated at all points. The patient is given a cupful of hot milk in which fennel has been boiled. By this means spasms are more quickly subdued, and perspiration is produced. But anyone acquainted with the premonitory symptoms of cholera, pricking and cutting pain in the small intestine, colic, want of appetite with the disposition to vomit, rapid loss of strength, and excessive headache,—may escape this fearful scourge of mankind by taking daily one or two half-baths, quite cold and lasting only two seconds. This will strengthen the system, develop natural heat, and promote assimilation, which is the principal thing. When such precautionary measures are adopted, the worst that can befall the patient will be English cholera.

The Spanish cloak, wrung out in hayseed water, put on warm, and well covered up with a blanket for an hour and a half, quickly engenders a great amount of heat, and dissolves morbid matter. When this is done two or three times a week, there is no more fear of cholera; nay, even a cloth, folded several times, immersed in hot hayseed water, and put on the abdomen in time, is an excellent preventive.

There are several internal remedies which may be used. Chewing and eating a few juniper berries daily, and drinking wormwood tea afterward; or a saltspoonful of angelica and septfoil, taken daily, will prevent the spread of the disease and remove vitiated and impure matter. A tea may be made of these roots, and three spoonfuls taken morning and evening. All who are afraid of this disease should use this tea; but the best thing is not to be afraid of it, because fear increases the susceptibility of the system, and so favors the outbreak of the disease. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. CHOLERA, ENGLISH. Diarrhœa with colic pain and vomiting usually occurs, whether in summer or winter, as a consequence of irregularity in diet, or change of temperature. The attack is best repelled by rest and warmth. A hot brick wrapped in a cloth, or a small bag of oats which have been soaked in hot water, is put on the stomach, to help weakened nature with artificial warmth; while sage or wormwood tea are taken internally. But if the natural heat is already excessive, it will be best to give a short, very cold, half-bath, during which the upper part of the body should be washed rapidly with cold water. Should the heat after that again become excessive, the half-bath and washing may be repeated. Four such baths and washings may be taken

in the course of a day, if the heat continues. A spoonful of milk boiled with fennel; or an infusion of fennel, camomiles and wormwood, should be taken every hour. With these simple remedies English cholera is generally cured within twenty-four hours, and the patient should then continue to take one or two half-baths or one or two full washings every day for a few days, at the same time dieting himself with simple but nourishing soups. His strength will soon return. Should the patient, when first attacked, feel very cold, he may apply a hot hayseed compress, referred to above under "CHOLERA," to the chest and as far down as the knees, and repeat it till thorough perspiration has been established. It should be borne in mind that, both in Asiatic and English cholera, the first thing is to produce perspiration; all the other remedies are applicable. With abnormal heat, however, the half-bath stands first in the order of applications. Anyone attending upon cholera patients will do well to masticate thoroughly and swallow from six to ten juniper-berries during the day. See also pp. 734, 735.

Kneipp Cure. CHOLERA INFANTILE. Intestinal catarrh and vomiting. Many children fall victims to this malady, which originates in most cases from faulty nutrition. A large poultice, or compress, of scalded hay-seed should be applied twice a day over the child's abdomen; or, if convenient, wrapped round the body. Or a cloth wrung out in half vinegar, half water, and laid on the same part, with a dry cloth or flannel over it, will have a good effect. Suitable light food and hardening the body are the best preventive measures.

Kneipp Cure. Clay Poultice, Prepared. See Index.

Kneipp Cure. COLIC PAINS. These, and other spasms attending them, are removed by a warm compress of water and vinegar, put on the abdomen. Take internally, as warm as possible, but not too hot, the infusion of one spoonful of fennel, boiled in a cup of milk.

Kneipp Cure. Congestions. See "DETERMINATION OF BLOOD."

Kneipp Cure. CONGESTION, Violent, yields to camomile tea, or to oil of lavender, taken on sugar twice a day, five drops at a time. Rue tea (Ruta graveolens, L.) is likewise an excellent remedy. Instead of the last, brandy in which rue has been steeped, ten or twelve drops of it on sugar, is a capital remedy; or the same quantity of oil of rue. A half or a hip bath should be taken in the morning; treading in water should be practised in the afternoon; or a knee or thigh affusion taken; and every second night, an abdominal or foot pack.

Kneipp Cure. CONSTIPATION. Continue for a considerable time to drink a tablespoonful of cold water every half hour or hour, and take three times a week, cold hip, trunk, or half-baths; also three full washings alternately with thigh or knee affusions; and now and then an arm and a back affusion. An abdominal pack at night is also serviceable; and various teas, taken morning and evening, such as those made with elder leaves or aloe blossoms, are recommended; and Kneipp's pills, but particularly Wühlhuber I (a mixture of different herbs).

Kneipp Cure. CONSUMPTION. See "LUNGS, DISEASES OF THE." Cough is mitigated and expectoration promoted by tea of violet leaves or a mixture of wild plantain, coltsfoot, lungwort or mallow, stinging nettles, and pewter grass. Compare also "COUGH" and "ACCUMULATION OF PHLEGM."

Kneipp Cure. CONTUSIONS AND BRUISES are cured by applying cold packs to the affected limb, and frequently also to the adjoining parts, which are in sympathy with it; for example, by packing the hand a finger of which has incurred injury; or the adjacent part of the arm, when the hand has sustained a hurt, etc. Or they are relieved by embrocations of camphorated spirits (a piece of camphor, the size of a hazelnut dissolved in half a pint of spirits), or by tincture of arnica, diluted with water.

Kneipp Cure. CONVALESCENCE is promoted by eating strawberries in combination with other aliments, or with milk (one part strawberries to two parts milk). Instead of strawberries, an equal quantity may be taken of sweet-scented woodruff, which makes the beverage still more tasty. Oats or barley, properly boiled, are nutritious, cooling and easily digestible, and particularly beneficial after smallpox, typhoid fever, etc. A quart of oats or barley, washed in cold water six or eight times, then stirred into two quarts of water, and boiled till the quantity of liquid is reduced by half, makes a porridge, with which two spoonfuls of honey may be mixed, and the whole boiled up again. A decoction of pollard, with honey, furnishes a strengthening and refreshing drink for convalescence. See also "DEBILITY." Fresh lime wood, or other charcoal, powdered, a large spoonful taken in milk once or twice a day, assists digestion.

Kneipp Cure. CORNS. A pair of linen socks are dipped in a warm decoction of hayseed, and put on the foot, which is then wrapped in a blanket for some hours. The hard layers of skin get soft, and can then

be easily peeled off. Warm foot steam-baths, and bathing the feet in a warm decoction of oat straw, produce the same effect.

Kneipp Cure. COUGH. The main object is to lead the blood away from the affected part, whether neck, chest or head. Full washings, or short wraps and drawing the blood to the feet by walking barefooted in morning dew, must be dried by turns. As cough is frequently connected with some chronic complaint, especially of the lungs,—asthma, or acute lung disease, for instance—it stands to reason that hydropathic treatment, as directed under the heads of these maladies, should be carried out. A person affected with pulmonary emphysema should take two upper affusions daily, should walk barefooted on wet stones and drink tea made from fenugreek, stinging nettles, and yarrow. Cough is frequently the premonitor of some approaching epidemic disease, such as measles, smallpox, etc. In that case, a full washing should be given hourly. If the body has again become hot, it must be cooled. As internal remedies, infusions of lime blossoms, lettuce and particularly of violets are strongly recommended. The latter remedy is far too little known and prized, considering its excellent effect. For children with whooping cough it is the most approved tea; but adults should try it in any affection which includes cough. A handful of fresh or dried violet leaves (Viola odorata L.) is boiled in half a pint of water, and two or three spoonfuls of the decoction are given to children every two or three hours: to adults, one cupful three times a day. Cough further occurs frequently in most acute and chronic diseases. These must be treated according to the instructions given, and with their cure the cough also will disappear. Hardening the system is the best remedy in this case. People with a tendency to cough are often very shy of water. By hardening the body in air and water, and particularly by exposing the throat, cough is best kept away. Cold feet are inseparable from cough: and if the blood be at all times given full access to the feet—in other words, if the feet can always be kept warm—there will be no question of cough. All the sweetmeats that are offered by speculators, as palliatives for it, are of little or no use. A half-bath, a full washing, and a short pack will often suffice, with a moderately good constitution, to put a speedy end to an obstinate cough. The complaint, however, arises sometimes from the stomach, and is caused by flatulence; this form will be discussed in detail under "Gastric Affections." The various affusions and teas, already mentioned, are the best remedies in such cases. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Cramp Veins. See "Knotted Veins."

Kneipp Cure. CUTANEOUS ERUPTIONS. Herpes. If impurities in the blood are not excreted, as a healthy body requires, they will often show themselves on the skin in the form of a scaly eruption. In all such cases, where non-excreted matter so gives rise to external eruptions, no matter on what part of the body, care must be taken that the stomach receives and digests wholesome food. That is the internal treatment, which may, however, be supported by tea of juniper-leaves, sage, wormwood, mint, or blood-purifying tea. Externally, the treatment should be directed to resolving and excreting the impure matter, and to invigorating the constitution. The strength of the applications must be regulated by, and proportioned to, the body strength of the individual patient. Examples will best show this. A man with a strong constitution was covered with a cutaneous eruption. The steam-bath, much as it is used as a measure of redress, is here altogether out of place: nor is a vegetarian diet absolutely imperative. The patient in this case was treated with the various affusions; one day upper and thigh affusions, the next day a back affusion: on the third day a cold full pack (excluding the feet) for two or three hours, or until the patient was in a comfortable and thorough, but not violent, perspiration; on the fourth day, an upper and a thigh affusion, on the fifth day, a half-bath with washing of the upper part of the body; and then again, on the sixth day, a liberal three-quarter pack as before. Anyone who will continue such a treatment for some weeks, taking, in addition, a full affusion now and then, who can be sure of good food, including meat with vegetables for dinner, and who will drink the various teas before-mentioned, or at least one of them, will very soon get rid of eruptions on the legs, arms, or body, as the above-mentioned vigorous man of forty got rid of his.

Why, it might be asked, apply in these cases so soon measures which are applied generally only after some weeks, or at the conclusion of a course of treatment. The answer is, that a vigorous constitution can well stand hearty, vigorous applications; that, therefore, energetic measures are here in their right place and may at once be resorted to for purifying the blood and regulating the circulation, objects which are best attained by the affusions. The sooner a good circulation is established, the more effective is the perspiration produced by cold packs, a perspiration which does not weaken the body as steam-baths, taken in sweating boxes, or chambers, do. Two such sweating packs a week, producing gentle evaporation, are quite sufficient to carry off in a short time all accumulation of morbid matter. Roast meat for dinner does not in the least interfere with this purifying process. After some time, half of the above applications will be sufficient, that is to say, one pack and thorough perspiration a week, one upper and thigh affusion, and a

half-bath. Finally, one full washing and one half-bath weekly will not only insure the patient against any return of the eruptions, but will protect him from disease and prolong his life, in robust health, for many years, provided he lives moderately in other respects.

Eruption on the head requires the following treatment. A full washing daily, for a fortnight, immediately on getting out of bed, and, twice a week, a pack in a shirt, or sheet, wrung out in warm hayseed water, and a half-bath. The best way to divide this course of treatment is: to take the full washing daily and, in addition, on the second day, a hayseed water shirt or sheet pack; on the third day, in addition to the washing, a half-bath; on the fourth day, the same as on the second; on the fifth the same as on the third; on the sixth only the whole washing, and on the seventh day the same as on the first, and so on to the end of the second week. Then the course should be changed, the patient taking a steam-bath every second day, and a half-bath every day (in the morning), and a full washing just before going to bed. After some time the head steam-bath may be discontinued, and a daily half-bath only is taken, until at last two half-baths a week will suffice. In cases of low vitality, where the circulation is weak and the natural warmth deficient, the following would be the course: If the eruption is on the body, legs or arms, begin with two hayseed shirts a week, and one full washing a day, to which add later two half-baths a week; and, finally, for the purpose of strengthening the system, an upper and a thigh affusion twice a week, and a back affusion once a week. As we said before, we do not treat diseases only, but patients, and the principle, therefore, is, "Individualize strictly"; that is, adapt the treatment strictly to the sufferer's individual condition. It stands to reason that one can, and must, at the same time localize treatment. Independent of the full pack, one may pack the part affected with the eruption,—be it the arms, or the legs,—separately at the proper time. One may also strengthen these parts by arm or leg affusions, or by immersing the limb in cold water for a minute or so. The so-called *lupus vulgaris* will be discussed under cancer. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. CUTANEOUS ERUPTIONS. Scarlatina, measles, etc. In the majority of cases, and especially with children and weakly adults, the use of the hayseed shirt, twice a week, followed by full washing, is advocated. In the case of strong children or adults, cold packs, the Spanish cloak, and full washing are more appropriate; the latter applied once every hour if there is much fever. The more the eruption breaks out, the better and the quicker is the course of the disease. If herpes exists on the head, the best application is the head steam-bath,

with cold washing or affusion; two head steam-baths a week, and a full washing daily. The various infusions—Kneipp's blood purifying tea, teas of strawberry leaves, elder flowers, or aloe blossoms—should be taken internally. For adults, troubled with eruptions on the head, an infusion of common pewter grass, and ten or twelve juniper berries divided in three portions, should be taken daily for some weeks. In order to give tone to the system, two or three half-baths a week are strongly recommended, to complete the cure.

Kneipp Cure. DEBILITY. An excellent nutritious drink is the bran of wheat or rye boiled in water and strained, the decoction then mixed with honey and boiled again for fifteen minutes. Half a pint of this mixture may be taken twice a day. White bread dipped in it is also very palatable. Bone charcoal (the sound bones of slaughtered cattle calcined and finely ground), about a saltspoonful taken daily with the food or in water, will serve to give tone to the system. For weakness of the bony frame, *white* bone meal should be taken. Gray bone meal, composed of black and white in equal proportions with the addition of pounded grains of white frankincense, is serviceable in case of debility of the internal organs. When bone meal is not forthcoming, powdered chalk may be used, a saltspoonful taken in water or with food; this is also good for children. Thorough attention to the skin, and, above all, plenty of fresh air, and easily digested but nourishing food.

Kneipp Cure. DETERMINATION OF BLOOD TO THE HEAD, especially when pains in the head are the consequence of it, is cured radically by foot steam-baths. All derivative remedies, such as abdominal compresses, or wet stockings (calf packs), and particularly walking barefooted, are the most reliable and simple means of cure. As a tea, Kneipp recommends rue tea, or the tincture as well as the oil of rue taken on a piece of sugar. But if, as is frequently the case, hard bowels and constipation are the cause of the mischief, then—in addition to Kneipp's pills—the water treatment recommended under those heads should be resorted to.

Kneipp Cure. DELIRIUM TREMENS. A beginning is made here with upper and knee affusions. Treading water every evening. Next, back affusion, and partial bath, and so on, in rotation, two applications daily, and two hip-baths weekly. Carry out the cure with juniper berries. Strengthening soup, morning and night; nourishing mixed diet for dinner. (See also "DRUNKENNESS.")

Kneipp Cure. DIABETES MELLITUS. This disease is, at bottom, only a severe form of indigestion. It cannot be treated or cured by any cut and dried method, but only by paying the closest attention to the individual circumstances of the case. A purely vegetarian diet is wrong here, as a rule, because it rather increases than diminishes the production of saccharine substance. A vegetarian diet may be advisable for the first week, but after that mixed food should be the rule. Meat with vegetables, and particularly soup made with burnt or browned flour, should form the staple diet. The water treatment is as follows: One day a thigh, the next day a back affusion; partial baths in the afternoon or evening. Continue thus for four weeks. Next, two upper, and one back affusion, and two partial baths each week; these applications to be continued for several weeks. If the patient is corpulent and has an abnormally large head, as frequently happens, the head steam-bath, followed by a head affusion, should be taken every other day, in addition to the above applications. Two or three hip-baths should also be taken weekly. After about a fortnight, the full affusion, and the lightning affusion may also be taken by turns. For a tea, the decoction, or tincture of tormentilla (Cotentilla tormentilla) is especially recommended as the only herb which has proved itself particularly efficacious in *diabetes mellitus*. Exercise out of doors, such as light work in the garden, or sawing or splitting wood, for an hour or two every day, is recommended. Be it expressly mentioned here that it is a widespread error to suppose that the duration of *diabetes mellitus*, or the percentage of sugar present, is a true indicator of the intensity of the disease. No, that depends entirely on the strength of the organs as yet in a healthy condition. It is just this affection which proves to demonstration that neither the application of steam, nor a purely vegetarian diet, can effect a cure; but that only the above-mentioned applications of the cold water cure,—and in certain cases, only, the employment of the head steam-bath and innocuous herbs—can, with time and patience, accomplish the radical cure of the most severe form of general, and specially of gastric, disease, if a cure is possible at all.

Kneipp Cure. DIARRHŒA. Dried bilberries, well masticated and swallowed now and again, are an excellent remedy for slight diarrhœa. If it is persistent, painful, and tinged with blood, it is cured by drinking bilberry-brandy, a tablespoonful in a quarter of a pint of water. The brandy so diluted may also be taken in more serious dysenteric disorders; whilst warm vinegar and water compresses are applied to the abdomen. "Wühlhuber I." taken as tea, as well as dried, or stewed and strained elderberries, is most effective in diarrhœa.

Kneipp Cure. DIARRHŒA, VOMITING WITH, is cured with warm compresses of water and vinegar on the abdomen, and suitable diet. Bilberries are particularly serviceable. Their preparation is found under "DIARRHŒA." Tincture of bilberries, one tablespoonful taken in six spoonfuls of warm water or wine, is the strongest form of this remedy.

Kneipp Cure. DIGESTION is assisted by taking daily a few grains of powdered chalk in water, or with the food; also by peppermint tea, a cupful morning and evening.

Kneipp Cure. DIPHTHERIA. This destroyer of our children is absolutely harmless when combated in time, and in the right manner.

The blood being congested in throat and gullet, the main object must be to disperse it, and to restore the normal circulation. This is best accomplished by clothing the child in one of its own shirts wrung out in hot hayseed water; then wrapping it in a blanket and putting it to bed. The blood, following a natural law, goes where there is heat, and thus is distributed all over the body, from the place in which it set up the inflammation in the throat; the inflammation then subsides, and the danger is over. The child usually falls to sleep after a short time. If, after an hour's time, inflammation and heat set in again, the procedure is repeated; or the child may be taken out of bed, washed all over with cold water, put back to bed again, and well covered up. In this way a copious perspiration will often be produced. A small, coarse sheet is more suitable for the purpose than the shirt. The child, as a rule, gets into a perspiration in such a pack. If the feet are cold, they may be warmed specially by a warm foot-wrap. This is the warm-water treatment, which is most frequently employed. But this dreaded disease is easily cured with cold water, in the form of upper jet baths. The childs bends down, or is bent down, and has a canful of water poured quickly over the upper part of the back, and is then put to bed to perspire. If the desired perspiration does not take place, the jet or douche is repeated two hours later. A teaspoonful of an infusion of fenugreek, or yarrow, or mallow, which dissolves mucus, is given every hour. This will promote expectoration, and assist respiration. It is likewise advisable to give the child daily about four teaspoonfuls of good salad oil, in order to allay the internal heat. When the child perspires, it should be left quiet in that condition. During the further course of the disease the child should be dipped twice or, if the high temperature renders it necessary, three times a day into cold water, so as to wet the neck, body, and thighs; but not the legs below the knee. The best way to effect this is, to take the child up, and, with one arm under its neck or shoulders, and the other under its knees, to

dip it, back downward, in a suitable bath. This simple procedure works wonders, if begun in time; and it will never fail, if recourse is had to it immediately when children, living in a place where diphtheria is prevalent, become seriously unwell. With a child already in a more advanced stage of the disease, and when the fungoid growth in the throat is going on apace, a powerful jet should be directed on the neck as well as on the upper part of the body (upper affusion); and this may be instrumental in saving the child's life. It is indeed a pity, that so simple a treatment should not be known and employed universally.

In the advanced stages of the disease the following treatment is also recommended. A compress, wrung out in hot vinegar and water, is applied to the throat, as hot as the patient can bear it, covered with woolen material, and renewed every quarter of an hour or twenty minutes. This will cause the fungoid growth to fall off, and it will be thrown up. The child should, at the same time, be enveloped in a lower wrap or three-quarter pack, wrung out in vinegar and water; and so remain for an hour or an hour and a half. This may be done twice in the day. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. DISEASES, TRANSMISSION OF, by bad blood and other constitutional defects of the parents. In our increasingly degenerated condition the sins of the fathers are visited on the children more often than ever. Many years of close intercourse with men interested in this subject, and with patients of every description, led Father Kneipp to remark that many cases had come within his ken, in which he could distinctly trace in children that their father had been treated for a length of time with mercury, and had still in his system the poisoned blood which had naturally been transmitted to the poor innocent offspring. Father Kneipp also had occasion to observe, how children, whose parents had indulged in self-abuse, were, as the unmistakable evidence of this vice, dragging on a miserable existence with their digestive organs weakened and disordered, and were thus doomed to fall victims to consumption, for want of proper nutrition. It should be a consolation to all so afflicted that a rational water cure can radically restore both parents and children to health.

For children two partial baths and four full lavations weekly, one day a partial bath, the next two days lavation, are recommended. The diet had better be at first free from animal food; later, after about six weeks, mixed diet may be permitted. The parents should walk barefooted a great deal, and occasionally put their feet into cold water for twenty seconds in the evening, taking exercise afterward, and, if necessary, cloth-

ing the feet, in order to get them warm again. This is the treatment for the warm season, during which, after a six weeks' cure (but not sooner), a short river bath (duration, a few minutes), may now and then be added. In the cold season, two partial baths and two full lavations will be sufficient to recruit the weakened vital force, and to restore to its normal condition the disordered circulation of the blood. More must not be done on any account; if children, while being under this treatment, should catch a cold, evidenced by hoarseness, cough, and chilly sensations, they should have a warm application at once, the most suitable being the warm hayseed shirt. All young patients of this class had better be treated with the warm hayseed shirt, if they are attacked by scarlet fever, measles. diphtheria, etc.; because the weakened constitution is by that means best enabled to thoroughly rid itself of morbid matter, which would not be the case with cold applications.

Kneipp Cure. DISLOCATIONS AND SPRAINS. These are cured by embrocation of camphorated spirit (a piece of camphor—the size of a hazelnut—dissolved in half a pint of spirit), besides other resources of the natural method.

Kneipp Cure. DISSIPATION, and Infirmity Arising from It. Next to drunkenness, there is no vice so prevalent as that of the excessive indulgence of sexual passion. Millions of human beings ruin their whole life by it. The vice is visibly imprinted on the features; and one-half of all our lunatics are in the asylums only as the consequence of such indulgence. The medical treatment hitherto practised, with the poisons: mercury and arsenic, does not cure the disease, but only vitiates the blood more than ever. Paralysis, spinal complaints, and blindness, are the consequences of this perverse treatment. Here again it is evident that water alone, coupled with the very simplest diet, is capable of grappling thoroughly with the evil and of subduing the consuming fire of passion. In all the cases of this class the bowel action, sleep, and appetite, are very irregular, and the natural warmth and strength are much reduced; the first aim must therefore be, to improve those symptoms one after the other, and to make the treatment fall in exactly with the patient's individual condition. For the comfort of mankind it may with confidence be said that the Kneipp system cures all such cases radically. The following is the treatment adopted:

a. Diet. The food of such patients must at first be strictly vegetarian. Three times daily (for breakfast, dinner, and supper) strengthening soup, which for dinner may have an addition of broth to it; the patient must take besides, if possible, a large spoonful of milk every

hour before dinner, and the same quantity of water every hour after it, till the evening.

b. THE WATER TREATMENT is, for the first three days, a full washing daily, best with a mixture of water and vinegar; on the fourth day, washing of the upper part of the body, and thigh affusion; on the fifth day, upper and thigh affusion; the sixth, the same again; and on the seventh, a half bath. In each week following, three thigh affusions, three half baths, and a back affusion; all in rotation—one day upper and thigh affusions; the next, half bath, etc. Walking a great deal barefooted, treading in water, and walking exercise out of doors, are a *sine qua non*. After a few weeks, sometimes after one, mixed diet may be given at dinner.

Thus the enfeebled body is, within from fifteen to twenty weeks at the most, restored to life and vigor; and nobody is more grateful than those so rescued. If medical men in authority would prescribe a treatment of this kind for all afflicted with disease in hospitals, not only would thousands, who are yearly treated there without the slightest success, soon recover, but the number of suicides would considerably decrease; for we read in the newspapers every day, "the cause of suicide was some incurable malady." Incurable certainly, from a medical point of view, but mostly curable by the natural method of healing, if not applied too late. Hundreds of testimonials might be adduced in proof of the efficacy of this system, if the limited space at command would permit it. It is easy to perceive, why, with more vigorous constitutions, upper and thigh affusions may be applied at once, in rotation with the half bath. The less vitality there is, the milder and the less heat-absorbing must be the form of treatment. For Modes of Application, see Index.

Kneipp Cure. Drinking, Water. See Index.

Kneipp Cure. DROPSY. Incipient dropsy of the abdomen is treated with good effect by applying two whole or three-quarter packs and four partial baths, weekly, and by drinking daily a cup of pewter-grass tea, to which may be added six or eight finely-ground juniper berries. The cane-chair steam-bath, with an infusion of hayseed, is also recommended for the beginning of this disease; especially for patients who dread the water. Nettle tea, but also "Wühlhuber" and the infusion of juniper berries as well as of the tender twigs of that tree are good remedies. The cold, short wrap is an excellent means to prevent the disease.

Kneipp Cure. Dropsy of the Heart. Back and front compresses, in turn, are applied daily. If the patient is otherwise strong, the various

affusions will not be out of place. Rosemary tea should be taken, as well as the other infusions mentioned under "DROPSY," all of which act well on the kidneys. Tea also of dane-wort or dwarf elder root *(Sambucus ebulus, L.)* operates in the same way, and cleanses the kidneys besides. The roots are gathered late in the autumn, dried in the air, and boiled after being pounded. Wormwood, boiled with aloe, expels the unhealthy humors, from which dropsy may develop. Incipient dropsy may be cured by nettle or elder-root tea. Rosemary wine acts on the kidneys, dropsy of the heart, or dropsy in general; three or four spoonfuls taken in the morning and at night. The wine is prepared as follows: A handful of rosemary is chopped as fine as possible, placed in a bottle, and well-kept wine (best white hock) is then poured on it. It may be used twelve hours afterward. See also pp. 734, 735. For Modes of Application, see Index

Kneipp Cure. DRUNKENNESS. It is unfortunately true, that mothers will sometimes give their children alcohol in drops. Such children are backward in growth and development.

If the cure of a habitual drunkard is the task in hand, the treatment and cure of the patient are matters of unusual anxiety. As one looks for a nurse for a child, so must the person responsible for the recovery of a drunkard seek for an attendant capable of exercising a strong influence over the patient. As the vital force of a habitual drunkard is much reduced, it will not do to stop the supply of alcohol all at once; lest the heart's action should cease, and the patient collapse, from mere weakness. The patient should therefore be allowed, at first, a fourth part of what he has been accustomed to take; and should be provided, at the same time, with good, nourishing food. The first thing in the morning, browned soup; otherwise, little liquid, but a substantial diet, including plenty of vegetables. By degrees the daily allowance of alcohol must be diminished; until, after four or five weeks, by which time the system should have recovered tone, it should cease altogether. As this class of patients are generally affected with heart complaints—and, if beer-drinkers, find later that their liver and kidneys become involved—a water treatment must be adopted with caution. But it will, in all cases, be quite safe to begin with the knee affusion and upper-body washing, in order to get the alcohol out of the system; therefore, for the first fortnight, a knee affusion should be given every morning, and an upper-body washing in the afternoon. If the patient is stronger at the end of that time, and if there is nothing wrong with the heart, all the affusions may be applied in turn; including the half bath in rotation; thus, on the first day, upper and thigh affusion; on the second day, a half bath; on the third, a back affusion; on the fourth day, again the upper and thigh affusion; on the

fifth day, a half bath; on the sixth, a back affusion; and on the seventh, a full affusion. In addition to the baths and affusions, Kneipp prescribed a tea of wild plantain, wormwood, and yarrow, mixed; and for a change, another mixed tea, made from tormentilla, angelica root, and wild plantain; one cup daily, divided into three portions—of which one is to be taken in the morning fasting, one before the midday meal, and one before supper. Each of the tea-mixtures may be used for a week, in order that each may have time to exercise a favorable effect on the stomach of the patient. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Ear Affusion. See Index.

Kneipp Cure. EMACIATION. Two pints of milk, with two spoonfuls of finely powdered charcoal—that made from lime-wood is the best for this purpose—taken at different times, promote digestion. In addition, of course, a strengthening water treatment.

Kneipp Cure. EMACIATION. This morbid condition is frequently connected with cough and pulmonary complaints. The lungs, therefore, have to be attended to. When emaciation, however, has to do with intestinal inflammation, showing itself by abdominal pains and spasms, and great pain during meals, likewise by a pale complexion and dull eyes, three hip baths a week should be taken; chest and abdomen must be vigorously washed with water and vinegar every morning and evening; and a cold half bath (time, one minute) applied once a week. Twelve drops of wormwood in warm water should be taken internally twice a day. (See also pp. 734, 735.)

Kneipp Cure. EPILEPSY, or Falling Sickness. This terrible disease may derive its existence from several sources, and show itself in various degrees of severity. Faulty nutrition may be the cause, or an ill-judged way of dressing, mental and bodily over-exertion, fright, and accidents of various kinds; but also inherited nervous weakness.

The following remedies are therefore suitable: Wholesome, strengthening food, a rational system of hardening the body, exercise out of doors, fresh air and light, avoidance of bodily and mental exertion. In aggravated cases, strict vegetarian diet is prescribed—fruit, bread, and stewed vegetables. All stimulating drinks, such as coffee, tea, beer, wine, etc., must be most strictly eschewed. It is truly a mockery that, to this day, epileptic patients should be treated with bromide and iodide of potash, arsenic and anti-pyrin; and that, by a momentary suppression of the symptoms, their wretchedness should only be intensified. The water applications are commensurate with the degree of the patient's strength.

If an *efficient* natural healer is called in at once at the beginning, most cases of epilepsy are soon cured, as the following instance shows:—About seven years ago the daughter (aged fourteen) of a railway porter at Fischheim, near Rochlitz, was attacked with epilepsy. A philanthropist and experienced natural healer, widely known in that part of the country, was consulted. The cause was overwork. The girl had been obliged to perform domestic service in the neighboring village, besides attending to children; consequently, she went late to bed and had to rise early. Evidently such a strain upon her powers was too great for one so young. By dint of daily full washings, two hip baths weekly, walking barefoot, moderate exercise in good, fresh air out of doors, and generous diet, the affection was mastered within a few weeks; and it has not returned to this day. But aggravated cases, too, are curable, with good nursing and appropriate water treatment. Excretion and increased perspiration are of the greatest advantage in all cases of this kind. For a boy who had several epileptic fits a day, the course of treatment prescribed by Kneipp for six weeks was as follows: *First course*—An affusion to the whole of the lower part of the body (thigh affusion), twice a week; back affusion (from the end of the spine upward), twice a week; affusion to the whole back surface of the body (back and legs), once a week; wearing a shirt, steeped in warm hayseed water, once a week for an hour and a half. *Second course*—When, as a result of the first course being carried out strictly, the attacks had ceased for some time, the patient received the following treatment: Thigh-jet, three times a week; back affusion, twice; a quick washing of hands, chest, abdomen, and the whole of the back, with cold water three times. The washings were given an hour before it was time for the boy to get up; and he was at once put back to bed, without being dried. He continued permanently free from fits, and was in better health than before he was attacked with epilepsy. There are certainly many worse cases than this, in which the treatment can only be devised from day to day, under the direction of an efficient natural healer in an institution; or at the patient's home, if the circumstances permit; but, as has been said before, a vegetarian diet is a *sine qua non* in all such cases. It must, however, be mentioned that there are also many sufferers from this disease who, if not altogether beyond the reach of help, can be cured only with the greatest difficulty; especially when the malady is of long standing, and has been treated medically for a long time.

See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. ERUPTIONS. When they are caused by vitiated blood, they are cured with strawberries; about a pintmeasureful to be eaten before and after dinner. A suitable water treatment must, of

course, be pursued in addition; the Spanish cloak pack, whole washing, and thigh affusion, each twice a week; and a short wrap, twice at night.

Kneipp Cure. ERYSIPELAS. Derivation of the blood, by means of cold or warm packs, from the part attacked, and then applying a compress, covered with woolen material. Mild, full lavations with a sponge, care being taken to get warm immediately afterward, are also recommended. It is further advisable to apply colt's foot leaves to the affected place. See on this subject, "Open Sores on the Feet."

Kneipp Cure. EXCRETORY OIL. This oil is the only secret remedy in the whole laboratory of Father Kneipp. It assists and promotes the solution and elimination of morbid matter in and from the body. It is applied *externally* in eye affections or tooth-ache. After gently rubbing the parts behind the ears, in order to produce a little heat, three or four drops of this oil are dabbed on the parts thus warmed. If there is no good result within a day, the gentle rubbing and subsequent oiling must be repeated. Kneipp employed this treatment in scrofulous eye inflammation. (The oil is to be had at the *Landau* dispensary in Wurzburg.)

Kneipp Cure. EYE AFFECTIONS. Also in these diseases, which occur so frequently and under such various forms, Kneipp has to record the most brilliant results. Many a sufferer, who was near losing his eyesight, and even people who had already lost it, have recovered the precious light by this cure. As a rule in such cases also the maxim holds good: ***When the entire system has been brought into a satisfactory condition,*** the eye too will get right again. Besides water, there are other remedies for affected eyes, which act as purifiers, solvents, and strengtheners. Aloe water is a very good purifier. One has only to put a small pinch of powdered aloe into a medicine glassful of warm water, and to shake it well, and the eye-water is ready. The eyes should be washed with it twice a day. The way to do this is to dip a small piece of lint or linen rag into the water, and to lay it upon the open eye, not the eyelid.

Fennel-water, too, is a capital remedy for the eyes; as well as honey, wormwood, rosemary, eye-bright. The tea must never be made strong, but very weak.

Sugar and honey, applied in the form of an ointment, are also very effective.

a) **Eye Inflammations.** When the eyes water or discharge mucus, a head steam-bath is usually given, followed later by foot steam-bath and warm foot baths. Soft whey may be placed on the inflamed eyes over

night. All that has been said on the application of the steam-bath must be scrupulously observed. The head affusion, after the bath, acts with very strengthening effect on the whole head. Half a can of water is sufficient.

b) EYE AFFECTIONS of a scrofulous nature are best cured with three full baths (85°) a week, for which cold washings and half baths should be substituted. In cases of scrofulous children, sore eyes are treated very successfully in the following way: The child is taken out of the warm bed, and dipped into cold *) water up to its armpits for three seconds, once a day; and twice a week it is wrapped for an hour and a half in a warm shirt, steeped in an infusion of hayseed. After a month's treatment, the applications are reduced to three cold dippings and one warm-shirt wrapping in each week; and are so continued for a few weeks. (See also "EXCRETORY OIL.") In eye complaints wormwood tea may also be applied as an eye-water. If there is heat in the eyes, a decoction of an American aloe leaf (about a pint of water), with a teaspoonful of honey mixed in it, should be taken internally in small doses, in addition to the careful washing of the eyes. Or the aloe eye-water, made thus: A good pinch of aloe powder is put in a medicine glass, hot water is poured over it, and the mixture is well shaken, as mentioned above. Aloe water, thus made, and applied three or four times a day, is an excellent wash to counteract watery or mucous charge from the eyes. A little twitching and burning at first must be expected. Eye-bright *(Euphrasia officinalis L.)* is employed either as an infusion or powder; the former for washes and compresses, the latter taken internally—a pinch of it in a spoonful of soup or water. The infusion serves likewise as a stomachic bitter, to assist digestion and to improve the gastric juices.

c) CATARACT. There are three varieties of cataract; the green, the black, and the gray.

Green cataract is caused mostly by determination of blood to the eye, and congestion in it. If taken in good time, it may often be treated successfully by drawing the blood away from the head to the feet; which, in most cases, will be found to be cold.

TREATMENT.—The best derivative measures will be knee and thigh affusions, and walking daily in water. For strong constitutions, three upper affusions; for weaker patients, three washings of the upper part of the body, in rotation with three half baths, may be prescribed. In addition, two eye baths should be taken daily; and the eyes should be fre-

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*) In order not to frighten the child, the water used must at first be tepid, and colder only by degrees, as the child gets used to it.

quently washed with aloe water and wormwood tea. Green cataract is easily perceived, as the eyes generally protrude considerably, and have a greenish color.

In black cataract, the treatment may be brought to bear more directly on the head; though the main object must still be to regulate the assimilative functions by vigorous measures.

Two or three eye baths should be taken daily; with a head affusion one day, and a half bath the next. Thus, three head affusions and three half baths will be taken weekly; and, between whiles, two full affusions during the week. In black cataract, the optic nerve gradually decays; in which event there is no possibility of cure.

Gray cataract is also a serious affection, consisting, as it does, in a clouding of the lens of the eye. In most cases an operation is resorted to, and the opaque lens is removed. But if a radical water cure be entered upon, under competent advice, in the earliest stage of the disease, its postponement is possible. Not only the eyes, but the whole body must be treated. One or two eye baths should be taken daily; and every week three packs, two or three head affusions, and two throat packs. These will be the most effectual applications.

A landowner and magistrate, in a village of the county of Glatz, was affected with cataract, and nearly blind. Celebrated oculists in Breslau and Neisse had treated him for a long time, without result. He had been compelled to give up his magistracy, and had resigned himself to his fate. In the extremity of his need he applied the Kneipp cure, and after a six months' treatment, the main features of which were affusions and walking barefooted, his precious eye-sight was saved. The name of the village is Oberhaunsdorf, near Glatz, and the name of the landowner, *R. Kuschel.*

The amount of misery which has been wrought in the world by specialists is absolutely outrageous. Is there any sense in treating specially the eyes, say, of a strong, plethoric butcher or brewer, whose sight is getting affected? Frequently, and in the majority of cases, the diseased eye need not be touched at all, and will recover of itself if upper, knee, and full affusions as well as half-baths are judiciously employed to restore a normal circulation of the blood. How quickly would the affection be stopped at the very outset, and how terrible is the picture of misery presented on entering an institution for the blind! Ask, and you will be convinced that of every hundred blind people hardly five were born blind; all the rest have been "cured" blind by medicine! Is not that fearful to think of? Most of these blind persons were, when children, treated for scarlatina and measles in the orthodox medical fashion; that is to say,

the morbid matter was never expelled, but only suppressed, and the result was blindness or deafness!

For the eyes Kneipp prescribes particularly certain curative eye baths. The face is immersed two or three times consecutively, with the eyes open, in a basin of cold water, for five seconds. Anyone who does this several times a week will have good eye-sight to a great age; provided, he hardens his body in other respects, and lives moderately.

A gentleman, aged thirty-six, felt during three years his bodily strength and eye-sight failing. He was nearly blind, when he was compelled to resign his official duties. He sought help from the most famous specialists, who tried all they knew, and finally declared that the optic nerves were completely paralyzed and that therefore recovery was out of the question.—By treatment with water, new life and vigor were thrown into the whole system. One day, full washing; the next, upper and knee affusions; the third, upper and thigh affusions; the fourth, full washing; the fifth, upper and thigh affusions; again on the sixth, upper and knee affusions; the seventh, back affusion. These are the applications during the first week for all cases of this kind. The unfortunate man had lost all his appetite: but it returned to him with the water treatment. He lived on the simplest fare, which unfortunately is too rarely known and chosen —namely, strengthening soup (not broth), morning and evening. For dinner a little meat and vegetables. His appearance gained from week to week in freshness and health, while his strength increased. After twelve weeks he found himself in perfect health; his strength was completely re-established, and his eye-sight, which had quite failed, improved from day to day, slowly, but surely. The applications during the weeks following alternated between half baths, upper and thigh affusions, back and knee affusions, and full washings; so that each of these was applied twice in rotation.

A mother brought her boy, a pitiable object, almost half dead, and yet not affected with any particular disease. The complaint was, in the main, that he was all but blind; and that all that had been done for his eyes had not benefited him. Kneipp saw at once that the poor creature was not properly nourished, and that naturally he must waste away.

The poor boy had no appetite; though the best wines (in small quantities), coffee, beer, and a choice selection of food were given him daily. He was now washed every day with cold water, and had for ten days, every twenty-four hours, an upper and a lower affusion; after that, a daily half bath, with upper and thigh affusions; for diet, strengthening soup twice a day (not meat broth); good, simple, mixed food at the midday meal; and between breakfast and that meal a spoonful of good milk hourly; the

same again between that meal and supper. Five weeks later, the boy looked the picture of health, was happy and cheerful, always going barefooted. He relished his simple fare, and his eye-sight was completely restored. There cannot be plainer proof, that an unnatural mode of life renders young people, in particular, wretched; while the systematic use of water, combined with proper food, will speedily rehabilitate a constitution which has been seriously weakened.

An eye-water of wormwood tea has often proved of the greatest service to people suffering with the eyes. Washing them three times a day in a decoction of fennel—half a spoonful of the powder boiled in half a pint of water—is recommended; while steaming with the same remedy (holding the eye over the steam of the decoction, instead of using the latter as a wash) has a still more powerful effect. Caraway and anise seed act in a similar way; or all three may be mixed. A teaspoonful of honey, boiled for five minutes in half a pint of water, makes a purifying and strengthening eyewash, which should be applied with a small piece of rag. For Modes of Application, see Index.

Kneipp Cure. Eye Bath. See Index.

Kneipp Cure. Face Affusion. See Index.

Kneipp Cure. FACE, ERYSIPELAS OF THE. While the face is repeatedly washed with warm water, warm and cold shawl (Scotch) compresses should be applied alternately, each being kept on for from half an hour to an hour. This should be repeated several times in succession. The heat will then be easily drawn downward by laying a cloth folded several times and dipped in cold water, over the whole abdomen. Some hours later, the patient should lie, for about an hour, on a cold, wet cloth, folded several times and well wrung out; while the heated face is occasionally washed with lukewarm water. In addition to small quantities of sweetened water, the patient may take daily half a teaspoonful of dry colt's foot leaves powdered. The leaves of this herb may likewise be laid on the patient's face; they will act as an absorbent of the heat.

Kneipp Cure. FAINTING FITS. Removal of the causes in the first place, tight lacing, for instance; admission of fresh air. Next, short cold lavation over the heart and the forehead, as well as a derivative treatment. A teaspoonful of the tincture of gentian is also recommended; but above all, fresh air. See also "GASTRIC COMPLAINTS."

Kneipp Cure. FEET, OPEN SORES ON THE. Compresses of fenugreek, boiled like linseed (see "ULCERS"), draw out inflammation from

the margins of wounds, and prevent the formation of proud flesh, or blood poisoning. Leaves of colt's foot *(Tussilago farfara, L.)* are, in particular, efficacious, when the sore places are discolored and greatly inflamed. The leaves absorb the heat, and relieve the pain; and, if repeatedly applied, are an excellent remedy. The general water treatment must, of course, be observed; two hayseed shirts, two full lavations, and two half baths during the week.

The same treatment will hold good if a fistula forms; which will, at times, indicate unsoundness in the lungs, and a tendency to consumption. In such cases the thigh affusion is the first remedy to be employed, alternately with washing of the upper part of the body. After a week, the latter had better be replaced by the upper affusion; and it will then be remarked that the patient begins to get a fresh color in his cheeks; and a cough will often make its appearance. This is a good sign; for nature will now rid herself of morbid matter through the medium of the cough, instead of through the fistula; and through the skin as well; and so improvement will proceed. There may be several fistulæ on the feet, but all will heal of themselves, and will close when nature has done her work of expulsion thoroughly. As a drink to be taken daily, a cup of wild plantain tea, or a mixture of angelica root, furze, juniper berries, and St. John's wort or rosemary, boiled in wine and water, is very strongly recommended. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. FEVER. When there is fever heat, a full washing is, at all times, the first and best remedy; which, under certain circumstances, should be repeated every half hour. The degree of heat indicates the right time for the application—not the doctor. The lower compress is also an excellent remedy in high fever. In typhoid fever, half baths, alternate with simultaneous affusions on chest, back and arms, followed by full packs. Fenugreek tea, taken internally, is the most efficacious and cooling remedy.

Kneipp Cure. FEVER (MUCOUS). The head steam-bath is particularly appropriate here, to be followed, three times within two days, by the head affusion, or washing the head. The Spanish cloak likewise applied warm, for from an hour and a half to two hours, to anæmic patients who cannot bear cold water, is an excellent means of cure. But this deep-seated catarrh, for mucous fever is nothing else, also yields to the cold-water cure. The patient should have a full lavation hourly from six to ten times in succession, going back to bed each time, in order to perspire. When fever and heat are reduced to some extent, two or three lavations a day generally suffice.

Kneipp Cure. FIBROID. Take in the course of a week two Spanish cloak packs, three upper affusions, three thigh affusions, two back affusions, and one full affusion.

Kneipp Cure. FLATULENCE is removed by oil of spikenard, or of lavender; five drops to be taken on sugar twice daily; or by an infusion of centaury. In addition, two half baths, three hip baths, two thigh affusions, weekly; and an upper compress at night three times a week.

Kneipp Cure. Foot Bath, Cold. See Index.

Kneipp Cure. Foot Bath, Warm. See Index.

Kneipp Cure. Foot Pack. See Index.

Kneipp Cure. Foot Steam-Bath. See Index.

Kneipp Cure. GARGLE. Solution of alum. Tea of fenugreek or sage. When the throat is swollen, a gargle should be made of fresh or dry violet leaves (a handful in half a pint of water), and at the same time a throat wrap, steeped in the same solution, applied. A decoction of mullein *(Verbascum Schraderi Meyer)* has proved to be a good remedy for affections of the throat, catarrh and accumulation of phlegm on the chest; it becomes a still more powerful solvent if mixed with an equal quantity of black mallow.

Kneipp Cure. GASES AND FLATULENCE. The gases are formed chiefly in the abdomen, and often cause great pain, which is known as wind colic. Flatulence deprives us of appetite; produces nausea and vomiting and agony in the region of the stomach. Hot foods, which relax the stomach, are one cause of flatulence, because they vitiate the gastric juices. Potatoes, eaten hot and quickly; newly baked bread; leguminous vegetables; the whole family of cabbages; puddings which are not thoroughly masticated before being swallowed, develop gases and cause flatulence. When such gases accumulate in the stomach, the bowels are forced upward, the contents become hard; sometimes even the intestines are twisted and knotted, with fatal results in many cases. The gases often distribute themselves throughout the body, causing wind dropsy, which is often followed by water dropsy. Thus it is easy to perceive, how this relaxed condition may lead to severe illness, and even to death. The best remedy is to wash the upper part of the body twice daily, morning and evening; and to take a thigh affusion at midday. But it is an indispensable condition that the body must be thoroughly warm, before the washing or affusion begins; and that it be again thoroughly warmed after

the application, either by exercise in the open air if possible, or by going to bed. After two or three days, the back affusion may be taken; it will have the effect of loosening phlegm in the chest, and cleansing the kidneys and liver. These applications may be continued in rotation for a week; a preference being given to those which are found most suitable. At night either an upper or an abdominal pack may be taken. The external treatment may be assisted by an internal one. An infusion of crushed fennel, or anise seed, or mint, or peppermint, or the mixed leaves or seeds of two or three of these herbs, will have a rapid and certain effect in expelling wind. A spoonful of wild plantain, or wormwood, boiled in honey, may also be taken early every morning for a week. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. GASTRIC AND INTESTINAL COMPLAINT. This common disorder is frequently followed by loss of appetite, constipation, liver complaint, asthma, also by affections of the throat, catarrh of the lungs, determination of blood to the head, and consequent nervous derangement. Great accumulation of phlegm is always co-existent with it. For so severe and chronic an affection, the best remedy is for the patient to get out of bed, and take a short, full lavation; then return to bed for a short time, in order to get warm again. A short, cold, partial bath every other day; a weekly back and a front compress for one hour, applied two or three times. The cloth, folded in three, must be immersed in two-thirds of water and one-third of vinegar. A cup of tea, made of elder leaves, should be taken one day; and on the next, three doses of wormwood tea (morning, noon, and evening; three spoonfuls each time).

Kneipp Cure. GASTRIC CATARRH. An obstinate catarrh, closely connected with great accumulation of phlegm and violent cough, was cured in the following manner: Daily, two upper affusions; and twice, walking in water up to the calves for five minutes. After two days, a back affusion was given, with a head and a thigh affusion. This was continued for four days. Then a half bath, an upper affusion, and a head affusion were given daily. As a gargle, the patient used an infusion of fresh elder leaves, which greatly facilitated the expectoration of the viscid phlegm. After sixteen days the catarrh had disappeared, and the patient was recommended only to take two partial baths a week.

Kneipp Cure. GASTRIC DEBILITY. For description of the complaint and its causes see first "STOMACH, WEAKENED, AND OUT OF ORDER." Two short packs a week, three partial baths, and three upper

and thigh affusions. Take three spoonfuls of wormwood tea every morning and evening.

Kneipp Cure. GASTRIC SPASMS. Warm hayseed packs, two or three a week, and three very short partial baths. Tea of wormwood and silver-weed, and after a fortnight three full lavations a week, and one weekly partial bath.

Kneipp Cure. GASTRIC ULCER. A four-fold cloth, dipped in a hot infusion of hayseed, is put on the abdomen every day for an hour and a half. The body should be washed daily with water and vinegar. Every hour a large spoonful of fenugreek tea, mixed by turns with that of wormwood and sage, should be drunk. Any kind of tea may be sweetened with honey, which is a first-rate remedy, particularly for small pustules in the stomach. It acts as an astringent, ripens and cures them.

The diet should be simple and digestible, strengthening soup for breakfast, and, till dinner time, a large spoonful of milk every hour; for the rest of the day a spoonful of water every hour. After two weeks an upper and thigh affusion daily, and a partial bath twice a week. At the end of six weeks, three partial baths, and two full lavations a week, in order to give tone to the system. After that, one partial bath every three days will suffice. Patients suffering from this affection are fond of curds and whey, and of buttermilk; both may be strongly recommended.

Small pustules in the stomach are quickly contracted, matured, and healed with honey, best when it is mixed with some suitable tea.

Kneipp Cure. GLANDS, SWELLING AND INFLAMMATION OF THE. It may occur at a great many places. There are glands of the neck, groin, and breast, etc., and any of them may be swollen and inflamed. The causes are various: Mechanical irritation, pressure, strain; but especially bad blood and defective circulation, for a healthy constitution is free from all such diseases. Most frequently are the ***tonsils*** affected, especially in children. The appearance of children so affected is not healthy, they vary a great deal, their throat and often also their heads are swollen, as well as the tonsils on one side. The child may look emaciated, or tolerably strong; but in all cases one has to deal with vitiated blood, and the enfeebled vital force has to be assisted with warm and cold water applications. For the first fortnight a warm shirt, wrung out in an infusion of hayseed, and covered with a blanket, must be put on daily for from an hour to an hour and a half. This will assist in carrying off injurious excretions. The child should have, in addition,

a daily cold washing,—or, better still, be immersed for two seconds in a full bath (from the feet to the chin). A nourishing diet and wholesome air should, of course, be provided. After a fortnight the applications of the warm shirt may be reduced to two a week, but the cold washings, or full baths, should be continued every day. Instead of the hayseed shirt, wraps wrung out in an infusion of the bark of young oak may be applied.

Most doctors, in such cases, resort at once to cutting; but chiefly when tumors in the breasts of females have to be dealt with. "Removal by cutting, or cancer," they say. But the natural healers cure the ailment very simply and without an operation in the following way: During the first fortnight the patient is given daily an upper and a thigh jet bath, to strengthen the enfeebled body, and three half-baths as well. On the affected mammary gland a coarse linen cloth, folded several times and steeped in an infusion of pewter grass is placed, and well covered with a dry woolen cloth. In this way the swelling will gradually disappear. To prevent a recurrence of the malady, and to permanently strengthen the system, it is advisable to take two half-baths and a full washing weekly for some time to come.

In cases where the glands of the groin are swollen, an excellent remedy is to lay scalded hayseed on them, and to keep it on firmly by means of a pack applied to the abdomen. With cold washings three times a week, the glands disappear in these cases also after a short time through the action of the simple remedies above prescribed. In all glandator affections a cup of an infusion of young oak-bark, divided in three portions, may be given daily. In the case of children, swollen glands are the consequence of scrofula, a saltspoonful of bone-meal, prepared in Kneipp's manner, should be given to them three times daily in addition to the above applications and the oak-bark tea. Malt coffee should be their drink. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. GOITRE, DERBYSHIRE NECK. A piece of coarse linen is dipped in the infusion of scalded oak-bark, and put as a pack round the throat. But this remedy is of use only when the affection is in its initial stage, or for inflamed throat and glands. Knee and thigh affusions should be taken as well, and an abdominal pack at night.

Kneipp Cure. GOUT. There is no remedy, doctors openly declare, for this fearful malady; but they apply poisons to mitigate it. The water cure attacks it with great success, as hundreds of grateful testimonials could testify. The treatment is either with warm or cold water, according to the case in hand. As a rule it is proper to apply packs of

hayseed to the affected or swollen parts every two or three hours; that is to say, hayseed is scalded with hot water, enclosed in cloth and laid on the diseased part. Warm oat-straw hip-baths, or the Spanish cloak, once or twice a week, are very serviceable. Warm baths of 95° to 101°, with a decoction of pine sprigs or hayseed are also recommended. Three cold full washings a week, on first getting out of bed; or three knee-jets, two half-baths and washings of the upper part of the body, and the warm hayseed shirt once, will probably command success. While heat acts as a solvent on all morbid matter, and partial or full washings give tone to the system and assist excretion, knee affusions and half baths bring the blood into the lower parts of the body, and walking in dew early in the morning assists the cure. After about five weeks the number of warm, dissolving applications should be reduced to at most one a week, the cold ones being meanwhile continued. Arm affusions may very well be tried if great pain exists there, and if hayseed packs have been applied previously. With patients otherwise strong, who are suffering great pain without any swelling being apparent, the upper and thigh affusion may at once be proceeded with after a few full washings, and in turns with half-baths. It is just the cold water which all gouty people dread most; yet a vigorous cold jet where the pain is most agonizing is often of the greatest service. Quite cold hip-baths, which greatly strengthen all the abdominal organs, are to be recommended, especially for women. Warm applications are at best only helps, whereas cold ones produce natural heat, and that is what the gouty patient lacks. In order that no relapse may occur, two half-baths and one full washing a week, and occasional walking in water, are much recommended. It may be imagined that a suitable, easily digestible diet is a *sine qua non*; for a sufferer with the gout is always troubled more or less with defective digestion. The stomach of gouty patients is not as a rule in the best condition. If a diet is offered it—the simplest is the best—which it can digest well, and if care be taken that the body perspires properly,—that is, throws out its impure matter—the cure is more easy than it is currently believed to be. Gouty people are often of a flabby, fleshy habit; the natural healer, therefore, knows at once how to treat them. The first thing is to get the blood to circulate properly. The water cure is seconded by the patient drinking the infusion of primroses, elderberries or elderblossoms several times daily. Gouty patients are also recommended to continue for some time to drink a tea made of mouse car, a plant which is often found. The quantity taken should be one-third of a cupful, morning, noon, and night. The free use of sauerkraut is also advised. It happens not unfrequently in this cure that the sleep of the patient is at first rather worse than better. This symptom should

not be misinterpreted. The quickening of the circulation, so long obstructed and confined and sluggish, and the return of the blood to parts which for a long time it has not reached, may cause a little restlessness at night; but this condition will improve from week to week, as the natural heat returns and proper circulation is re-established. Embrocation with camphorated oil or spirit soothe the pain, but the latter must not be too strong, as camphor irritates the glands which are easily caused to swell. See also pages 734, 735. For Modes of Application, see Index.

Kneipp Cure. GUM-BOIL. Abscess in a Gum. A swelling connected with a tooth will often develop into an abscess, frightfully painful, discharging matter, and apt to bring decay of the tooth in its train. Ladies who keep their heads very warm,—even covered up with hoods or kerchiefs—all the year round, are particularly subject to such maladies.

Accustom the head to be without covering of any kind; cleanse the sore, if any—or wash the mouth and gums every hour, and gargle the throat eight or ten times a day—with a decoction of pewter grass. The cheeks, from the hair to the chin, should also be well douched with cold water on the outside, twice a day, which can best be done through a tube. Vigorous action must be brought to bear at the same time on the whole body. If the patient is corpulent, one affusion daily; in warm weather, an affusion and a full bath; in the winter months, a full affusion one day; on the next, a back affusion; on the third, a thigh affusion; on the fourth, a half bath; and so on, repeated in the same order.

The head steam-bath, twice a week, is advisable in cases, in which the head of the sufferer appears swollen or abnormally large.

Affusions are not suited to patients for a slight build, for whom four whole washings and two half baths will suffice in the week, one of the latter being taken after two of the former.

Wet socks should be worn at night.

Kneipp Cure. HAIR, LOSS OF. Improper food, softening of the body, or severe diseases, are often the causes of this symptom. Besides attention to general cleanliness, the head should be washed with warm water and soap, and then with water of stinging nettles, and well dried. The head should not be kept too warm; it is well to go bareheaded a great deal, so as to expose the head to air and sun. In certain conditions of weakness, connected with involuntary emission, an upper and a head affusion, of short duration, should be taken. With proper water treatment and moderate living, both the falling out of the hair and the involuntary emissions will cease; head affusions must not be taken more

frequently than twice a week; but the upper affusions should be given, if possible, twice a day. When the water of stinging nettles is employed for the head, the latter should be rubbed with fine salad oil once a week. (See also "INVOLUNTARY EMISSIONS" in Index.)

Kneipp Cure. Half Bath. See Index.

Kneipp Cure. Hand and Arm Baths. See Index.

Kneipp Cure. HARDENING THE BODY. The way to health leads only through the hardening of the body. The great susceptibility to disease of the present generation, the receptive soil for all possible diseases, has its origin in the want of hardening. The army of weakly, nervous, and anæmic people is chiefly the outcome of softening. The slightest change in the weather produces colds and catarrhs; even the too hurried entrance from the cold street into the warm room will be followed by a certain roughness and thickness in the speech. In every member of the body there is illness latent; and it is hard to believe that our forefathers lived in airy mud huts, and bathed in the streams at all seasons of the year.

Hardening should begin, therefore, with the suckling infant. If a vigorous, disease-resisting race is to be produced, a beginning must be made by hardening the children in their tenderest years. With that view, Father Kneipp prescribes, as the accompaniments of almost all water applications, extremely simple and safe means of hardening the skin of the whole body and of its various parts. Such means are:

Walking barefooted;
Walking in wet grass;
Walking on wet stones;
Walking in freshly fallen snow;
Walking in cold water;
Cold bathing of the arms, legs, and feet.
The knee affusion, with or without the upper affusion.

These short and simple hardening exercises should not be looked upon as follies; nor should they be feared as likely to lead to colds, sore throats, catarrhs, and rheumatism. Exactly the contrary will result from them. A slight effort and trial will prove this. Let such a trial be made by walking barefooted in the room, at any convenient time of the day whether early or late; and out of doors on sunny days. We shall soon find that the circulation in the feet is improved, that the fresh air, and stream of light and warmth are beneficial to the extremities hitherto shut out from air and light, and invigorating for the whole system. We shall soon discover that there is no such effectual cure for chronically cold feet

as going bare-footed. It is a matter for regret that this healthy exercise is still too little thought of in many of the establishments, in which the natural method of healing is carried out.

WALKING IN WET GRASS OR ON WET STONES—Is even much more beneficial. Whoever suffers from determination of blood to the head, from headache, or throat affections, and who will try these two remedies, will find that he cannot praise them enough. A quarter of an hour spent in this way will be quite enough, although the patient will soon wish to continue the exercise twice that length of time.

A WALK OR RUN FOR ONE OR TWO MINUTES IN FRESHLY FALLEN SNOW—But only when it is freshly fallen, makes the feet burning hot, and draws the blood downward. How fond children are of doing this, yet they never catch cold in consequence. Against chilblains and toothache, a run in fresh snow is an approved remedy.

WALKING IN WATER UP TO THE CALVES—Is one of the most powerful and effectual means of hardening. It has a beneficial effect on the whole body, but specially on the kidneys, and as a diuretic. Many affections of the bladder and kidneys will be warded off by this means.

It also acts upon the stomach in the way of relieving flatulence, and lightens the chest and respiration. It may be practised for one minute only, at first; afterward, for five or six minutes. The colder the water the better will be the effect. The weakly patient may begin with chilled water, and by degrees go on to cold. The arms, as well as the feet, should now and then be plunged in cold water up to the shoulders; and in some illnesses it is the rule to put the arms and feet into cold water simultaneously, in order to regulate the circulation and restore the flow of blood to the extremities This is best accomplished by placing the arms in a vessel on a table or other raised surface, while standing in a bath.

THE KNEE AFFUSION—Is also an excellent hardening specific. The method of its employment will be explained more precisely later on. It should only be used every three or four days, if used alone; otherwise, only in turn with the upper affusion or the upper body washing; and it may be had recourse to when the feet are cold, up to the ankles. It attracts the blood into the empty veins, and draws it from the upper parts of the body to the lower, with beneficial results. It stands to reason that all these hardening exercises should last a shorter time in winter than in summer; and that they should be persevered in. The anæmic and nervous had better begin them in summer, although they need not apprehend any ill effects from trying them in the winter. They are suited to people of all ages, but best of all to children. Cold

feet are only too frequently the cause of the dreaded diseases—scarlatina, measles, diphtheria, etc.; and, on the other hand, they are the accompaniments of most chronic maladies. All persons in infirm health; all sufferers from stomach, abdominal or lung complaints, have to complain of chronically cold feet. The blood, which is wanting below, flows in increased quantity and irregular course to the upper parts—the abdomen, stomach, chest, heart, throat, and head—and inflammation of various kinds ensues. The healthy and unhealthy alike should therefore direct their attention to ensuring an active circulation in the feet, by adopting the above simple hardening measures, and so regulating the flow of blood in the lower limbs.

Whoever will daily go through one or two of these exercises, if only for one minute of time, will soon feel the favorable influence, which they will have on his general bodily condition, and will be abundantly rewarded for the slight expenditure of time and trouble. (See also pp. 734, 735.) For Modes of Application, see Index.

Kneipp Cure. Hayseed, Decoction of. See Index.

Kneipp Cure. Hayseed Shirt. See Index.

Kneipp Cure. HEADACHE. One daily upper affusion or full lavation, but more particularly walking on wet stones or on wet grass, are efficient remedies. Lighter cases are relieved by walking barefooted. Where there is heat in the head, the head pack is advisable. The procedure is as follows: Head and face are washed well with cold water, and a dry linen cloth wrapped round the upper part of the forehead, and carried over the head so as to cover it air-tight. A woolen cloth is then fastened over all. The hair must not be so wet, as to drip with water. If there is great heat, both head and pack are wetted again. All affections of the head caused by a cold, including rheumatic pains, are best cured by this pack. But head baths, short and cold, or warm and of a longer duration, are also recommended for it. Tea or powder of valerian root soothes headache. Persons, to whom a treatment with warm water is more congenial, may in cases of headache, accompanied by singing in the ears and stiff neck, attributable to sudden changes of temperature, use at once the head steam-bath. Headache, occurring often with women during the monthly period, is soon relieved, by raising the strength of the whole body; three full lavations and two partial baths should be applied every week for some length of time, and the headache will cease. Other women, again, complain of more or less violent headache, loss of appetite, and cold feet. In such cases there is a strong determination of blood to the head, and the blood has to be drawn to the

lower parts by taking a warm foot-bath, with ashes and salt, every evening (duration, fifteen minutes); three full lavations a week; two partial baths and knee affusions with cold water for one minute every morning, followed by exercise. To give strength to the whole body, two partial baths a week should be applied for a time. Coffee, tea, beer, and wine must be eschewed; on the other hand, a nourishing diet is to be observed; brown and strengthening soups in turns, and one good meal of mixed food, including meat, daily.—For certain kinds of headache, caused by wind rising from the stomach, and with which vomiting and mental maladies are associated—headache, in fact, due to affection of the brain—five drops of lavender oil on sugar, taken twice a day, are strongly recommended. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. HEAD, AFFECTIONS OF THE, are relieved by valerian root or its powder, taken in small doses. This expels gases. Tea of St. John's wort *(Hypericum perforatum, L.)* has the same effect. In case the latter herb is not procurable, yarrow will supply its place. Headache, in consequence of gases rising to the head, gives way to lavender oil, taken twice a day, five drops at a time on sugar. Infusion of green or dry violet leaves (a handful to one pint of water) relieves headache, and reduces excessive heat in the head. A compress moistened with the same infusion, and put on the forehead, or, better still, head lavation, especially of the back part of the head, with the violet decoction, is a good remedy.

Kneipp Cure. Head Affusion. See Index.

Kneipp Cure. Head Bath. See Index.

Kneipp Cure. HEAD, COLD IN THE. For an ever-recurring obstinate cold in the head, connected, in most cases, with accumulation of phlegm, the warm hayseed pack round the throat is the most efficacious remedy. But besides this application, which is used every day, two cold full lavations must be resorted to for from six to ten days, and the most malignant cold will thus be mastered. Light cases are speedily cured by one partial bath and one upper lavation a day. Some take a partial bath with upper affusion, and effect a cure still more quickly. A vigorous head affusion affords relief, though it is not to be generally recommended because a violent cold may result from it, unless the patient takes exercise immediately afterward, or remains in a warm room, and does not fail to dry his head and hair well immediately after the affusion. For others who suffer at the same time from cold feet it is desirable to take a warm foot bath or foot steam-bath, and, in conjunction with this, to wash the upper part of the body. A full steam-bath is highly beneficial

for this complaint. An observation may be permissible here, which holds good for the treatment of all diseases. If, as shown above, a miserable cold in the head admits, according to the patient's general health, of so varied a treatment, this proves the truth of the statements made by the natural healer Dr. *Zenker*, at Leipsic, in his treatise published in "The Natural Healer." There is—to speak with a somewhat Darwinian bias—no animal species in all creation which exhibits such great individual variety as the genus homo. There are on the average, perhaps, no more than five human beings out of a hundred, for whom, for example, head affusions are a radical remedy for a cold in the head. These five, however, have the peculiarity in common that they incur a cold, not like the other ninety-five through their cold feet, but, on the contrary, through their highly sensitive heads; and that is why the five are at once relieved by a direct strengthening of the head, a condition established most effectively by a vigorous head affusion. If this mode of treatment is sometimes applied even when there is no actual necessity for it, the weak head will thereby be rendered more capable of resisting cold, and the return of the complaint will be less frequent. Be it observed expressly that the *mere wetting* of the head has not the desired effect: on the contrary, it would lead only to taking a fresh cold; it is the strong cold stream from a full can of water that can alone produce the necessary reaction. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Head Pack. See Index.

Kneipp Cure. Head, Steaming of. See Index.

Kneipp Cure. HEAD, SWOLLEN. A great many diseases would be more speedily and more surely cured, if the importance was understood of giving, from the very outset, more attention to a swollen head. We see a number of people with short, thick necks and swollen heads, who complain of determination of blood to the head, of noise in the ears, periodical humming in the former, and who are frequently deaf or troubled with their eyes. Everything is tried except the right thing. The first application in such cases is the head steam-bath, affusions, and short wraps; next come, partial baths and full lavations, according to the case under treatment. Until the accumulation of blood in the head is relieved, all morbid matter excreted, and the affected part is strengthened, it will be of no use trying other measures. Defective hearing and weak eye-sight will improve after a short time, when all is in good order in the upper story. The upper part of the body should also be treated by half baths, hip baths, and affusions, taken in turns. It may happen, how-

ever, that violent headache and a swollen head may ensue as a consequence of catching a cold, so as to lead the sufferer to think that he is getting blind. In an acute case of this description no head steam-bath is applied, but a daily full lavation; except that the head and the inflamed eyes are powdered three times daily with a little sugar. In a short time, both head and eyes will improve. Syphilis, after having been wrongly treated with mercury, not unfrequently causes such destruction, as seriously to affect the heads of persons otherwise strong. A swollen head, occasional giddiness, and deep red cheeks point to blood poisoning, and in that case the *head steam-bath,* in combination with head affusion, is the first thing to apply. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. HEARING, AFFECTIONS OF THE. As poor children often become blind through medical treatment, of scarlatina for instance, so others suffer with their hearing, they grow deaf. In such cases the following is the treatment: Give daily a full washing with cold water, mixed with one-third of vinegar, observing the invariable rule, *not* to dry or rub the body afterward; give also daily an upper and an ear affusion, bringing the affusion to bear strongly on the parts behind and adjacent to the ears. Five drops of the oil of sweet almonds are dropped into each ear, the right ear getting the oil one day, and the left the next day. The oil softens the inner parts, and allays heat. If the deafness arises from a cold, the following is the treatment: Walk every evening in water up to the knees; twice daily, upper affusions, and a can of water to be poured at the same time on the parts round the ear; the oil of almonds to be dropped into both ears every day. A head steam-bath may be given before each upper affusion, for ten minutes or a quarter of an hour. After a fortnight, two vigorous upper and ear affusions, and two half baths a week will be sufficient. A third treatment is suitable, under the following circumstances: With increasing years—perhaps about the age of fifty—a woman finds herself troubled with giddiness and vertigo, etc.; and that her power of hearing has greatly diminished. Her complexion nevertheless remains fresh and healthy. In this case there is determination of blood to the head, and the head is often swollen. A head steam-bath should be applied twice a week; upper and ear affusions, three times a week, in each case both morning and evening; and a half bath, or full washing, on getting out of bed, twice a week. The patient should take a cup of tea—a mixture of yarrow, pewter grass, and St. John's wort—every day. After three weeks these applications are reduced by one-half; the hearing will soon improve and eventually be completely restored. Loss of hearing, consequent on draughts, will also

be speedily cured by the application of steam to the head, combined with the other measures.

All kinds of infirmities will make their appearance with advancing age, and difficulty of hearing will probably be one of them; but anyone may, by taking one upper affusion and two half baths, weekly, not only avert or minimize this inconvenience, but at the same time fortify himself against many of the ills incidental to old age. Father Kneipp furnishes the proof of it in his own person. Notwithstanding his seventy-six years, all his senses were as acute and powerful as those of a young man; and there is nobody in all Germany who daily gets through so much work with the greatest ease, as did incessantly this noble, reverend old gentleman, in the cure of both bodies and souls. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. HEART-BURN is best relieved by centaury tea *(Erythraea Centaureum, L.)*.

Kneipp Cure. HEART DISEASE. One might almost be tempted to believe that one-half of humanity is affected with disease of the heart, from the fact that so many patients say, "I have heart complaint." Of every thousand of such cases, hardly two or three are real. When the blood pumped by the heart, as by an engine, into all the parts and tissues of the body, is in a bad condition and circulating badly, symptoms certainly appear from which it may be concluded that the heart's action is faulty. If, however, the circulation of the blood becomes better, and its quality is improved, complaints of the failure of the heart are no longer heard. Softening of the body, the consumption of alcohol and too much animal food, and more especially want of exercise in the open air, and irregularity of life, are the chief causes of "heart disease." The excessive meat-eater and the drunkard must not be astonished, if the blood, which passes through the lungs eight thousand times in twenty-four hours, has in his case become so thick and clogged, that it is no longer capable of passing through the tiny capillary tubes of the lungs, and that oppression in the chest and blood-spitting are the consequences.

The applications with water may be various, in accordance with the different conditions occurring. For **excitement and palpitation of the heart** a simple compress, dipped in water of 69°, is put on the heart, and a leg wrap applied at the same time. The whole body must also be washed. Three things are necessary under the above conditions: 1) The local compress; 2) The derivative wrap; 3) Action on the whole body (washing). But knee affusions and walking in water are also advisable in such cases. An excellent remedy to regulate the accelerated action

of the heart is the upper affusion. It is the best safety valve, when excess of steam threatens to burst the boiler. It regulates the circulation in the pipes, relieves the boiler from pressure, and so prevents sudden heart apoplexy. Kneipp applied it repeatedly in desperate cases, where the doctors feared the opposite of what really ensued; *viz.*, tranquillity and moderate movement. Mint must be taken internally as a tea or in the form of powder.

Palpitation of the heart yields also to rue tea or from ten to twelve drops of rue *(Ruta graveolens, L.)* in brandy or salad oil. Rosemary wine acts soothingly; for the method of its preparation and quantity to be given, see under "DROPSY" in the Index.

For **spasms of the heart** *(Angina pectoris)* rubbing the chest till it is red, with a piece of cloth dipped in cold water, is the best remedy. As dropsy is generally the faithful companion of heart disease, it may be mentioned here, that there is nothing better for swollen legs than to envelop them in clay prepared with vinegar. Lemonade—made of fresh lemons—grapes, asparagus, celery, parsnip, and parsley root, may be freely partaken of. The last named, boiled in thick soup, is an excellent diuretic. The patient affected with dropsy must observe a non-stimulating diet, calculated not to make him thirsty. Strengthening soup, sour milk mixed with grated oatmeal bread, buttermilk, and sour or sweet cream are particularly good for people suffering from affections of the heart. Wheaten bread, too, spread with curds, and all kinds of green vegetables, spinach, nettles, water cress, plantain or rib-grass, mixed together and eaten like spinach, are strongly recommended, because they are excellent blood purifiers. It ought to be generally known that chills, particularly when contracted through coldness of the feet, articular rheumatism, medically treated (*i. e.*, only suppressed), may be instrumental in bringing about heart disease. The principal cause in every disease, and therefore also in this, is defective composition of the blood, and it is, therefore, necessary to be careful, in cases of obesity combined with heart disease, not to insist on hard-and-fast vegetarian diet. Meat, in moderation, once a day is here in most cases appropriate, as well as in all the various gastric and intestinal complaints; frequently also in *diabetes mellitus*.

For **hydro-pericardial dropsy**, compresses, full washings, wraps, and half baths are most effective. Wülhuber tea No. 2, and two glasses of rosemary wine a day may likewise be taken for a time.

For **fatty degeneration of the heart**, the Spanish cloak, three times a week; full washings and a short pack, daily; and particularly the half

bath, are to be described. Internally tea of pewter grass, juniper berries, and stinging nettles. A further word on the treatment of ***obesity*** may here be added. Those affected with this complaint cannot be treated according to a hard-and-fast method. There are plethoric and anæmic patients in this class. The diet of the former should be limited, in the main, to albuminous food, milk, eggs, meat, bread, and vegetables, but very little fat. Dietetic cures, like those prescribed by ***Oertel*** and ***Erbstein***, have a depressing effect, and often injure the health very considerably. For anæmic persons the diet should be generous; preparations of milk, eggs, and strong meat—broths, standing first in order of importance. Coffee is to be strictly avoided, and milk should take its place, this same rule holding good for the plethoric. The latter should enter upon long pedestrian tours in mountainous districts where the air is rich in ozone; whereas the former must be satisfied with shorter walks, which will result in a more active assimilation of their food. The cold-water treatment is decidedly important in this respect. It is well known that Carlsbad, Marienbad, Kissingen, and other health resorts owe most of the patronage they enjoy to obese patients. If we look more closely, we shall find that many patients certainly become very thin through drinking these waters, not only in consequence of the absorption of their fat, but also through loss, by combustion, of albumen, one of the essential constituents of the vital economy, and that an organic disease, chronic wasting of the body, a fatal germ in fact, was implanted in the system. The simple external application of cold water is far less dangerous, and yet a powerful means of promoting assimilation, in any individual system and to any required degree, without injuriously affecting the internal organs. The greater the irritation of the nerves in any individual, the greater is the assimilation—other circumstances being equal—and the greater the absorption or combustion of accumulated fatty matter.

One of Kneipp's assistants, Dr. ***Bauer***, M. D., expresses himself on this subject as follows: "In the case of a young, corpulent, plethoric man, upon whose constitution demands can be safely made, the power of assimilation will be promoted by frequent full douche baths, full affusions, and full baths. The Spanish cloak now and then—at least twice a week—is of very good service. After a four-weeks' treatment of this kind, a gentleman, still young, had lost fifteen pounds of his weight; his fat melted like butter, and it was evident that the systematic production of perspiration by cold applications, properly used and combined, increased the physiological combustion of adipose matter so powerfully as to merit attention to this method of cure, in the case of obese persons who are otherwise healthy.

"Drinking the waters at mineral baths has decidedly and permanently injured plethoric patients, as has been shown, even though their bulk was actually reduced, the danger of drinking these waters, in the case of anæmic patients suffering in like manner from obesity, must be emphasized, for in their case it is necessary to promote assimilation without weakening the system. The loss by combustion of the albuminous substance in the system not unfrequently affects these patients fatally. Here, therefore, the more gentle measures of the Kneipp system are particularly appropriate. No diaphoretic methods, but only partial, upper, thigh, and back affusions, short half baths, and light wraps are employed, and with excellent results. Assimilation is aided, and the combustion of adipose matter effected; not only without incurring a loss of albuminous substances, but, on the contrary, the while actually adding to them; and so the whole constitution is strengthened. In proportion, therefore, as anæmia is more or less pronounced in patients of this description, the Kneipp practitioner will have to modify or to accentuate his treatment." See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. HEAT, INTERNAL. Fresh strawberries, lemonade made from lemons, and fruit juices are strongly recommended.

Kneipp Cure. HEMORRHAGE OF THE UTERUS. Tea of pewter grass and of mistletoe improve the circulation of the blood. Three spoonfuls of either may be taken every morning and evening. The enfeebled system is then to be strengthened by a course of full washings daily for ten days and the use of half baths for several weeks, with full washings every other day. The patient should warm herself after every washing or bath, either by returning to bed or by brisk exercise. Coffee, beer, and wine are to be strictly avoided. A cold vinegar and water compress, laid on the abdomen, for an hour at night, is strongly recommended, with occasional cold hip baths.

Kneipp Cure. HEMORRHAGE, VIOLENT. Cold tea of pewter grass and salt water are taken internally, while cold washings of the chest and two short packs a week are applied externally; later on, knee and upper affusions.

Kneipp Cure. HERPES OF THE FACE. In slight cases, if treated at once, the vesicles should be washed every two hours with a strong decoction of horsetail, or well wetted by means of a small syringe, and three whole washings should be taken weekly. In cases in which the affection is attributable to impurities in the blood, the head should be well steamed for twenty minutes once a week, in addition to the above

measures, and an extra daily application of water should be made in the following order:

On the first day, a whole washing; on the second, an upper affusion; on the third, a back affusion; on the fourth, a half bath; on the fifth, a back affusion; and on the sixth day, a full bath.

That course of treatment should be continued for four weeks; after which, the steaming of the head should be given up, and only two half baths and one whole bath need be taken weekly. In obstinate cases, it is very advisable to place a compress of mixed pewter grass and septfoil over the vesicles a few times, at night, and to drink a cup of horsetail and wild plantain tea every day.

Kneipp Cure. Hip Bath, Cold. See Index.

Kneipp Cure. Hip Bath, Warm. See Index.

Kneipp Cure. HIP-JOINT, INFLAMMATION OF, also called "voluntary limp." Children, with a predisposition to scrofula, are frequently attacked with this disease; but it makes its appearance also without any such predisposition, and sometimes through direct mechanical injury. The pain is either restricted to the hip-joint, or extends down to the knees. Walking, and even putting the foot to the ground, is most painful; to lessen the pain, the patient when walking uses the affected foot only very lightly, hence the name "voluntary limp" given sometimes to the disease. The pain is but trifling in the beginning, but gradually increases with the continued use of the limb. The joint swells, and abscesses, discharging matter mixed with bone particles, occur, and may lead to incurable stiffness of the joint. The rheumatic affections of the hip-joint, which mostly make their appearance in old age, may also lead to complete stiffness of the joint, without any discharge of matter.

TREATMENT.—The rules given under "Strengthening Treatment" are, above all, to be strictly observed; particularly in case of natural predisposition to scrofula, when the instructions given under "Scrofula" are to be followed as well. In all such cases, though the causes may be different, the first remedy is the short hayseed wrap, applied lukewarm. After that, a short cold wrap; and so on, alternately. The half-bath, too, is of excellent service in these cases, and may be diligently employed in addition to the wraps. Thigh affusions are also especially recommended, the child being taken out of bed for the purpose, and put back to bed again. A cure may be effected pretty quickly if the inflammation has not gone far; but if there is delay in seeking help, many months may pass before health is restored. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. Horsetail, Common, Decoction of. See Index.

Kneipp Cure. Hot and Cold Foot-Baths, Alternate. See Index.

Kneipp Cure. HYDRO-NEPHROSIS. Dropsy of the kidneys. This affection is frequently connected with greatly swollen abdomen and increasing difficulty of breathing. In that case a foot steam-bath, full lavation, thigh and upper affusion, are advisable. A small glass of rosemary wine, taken forenoon and afternoon, acts favorably. This terrible affliction, in the face of which medical science stands helpless, is yet cured in many instances.

Kneipp Cure. HYPOCHONDRIASIS. This is a kind of mental affection, which demands the most careful individual treatment. In the case of weakly persons, extremely mild measures should be adopted, beginning with partial washings, hip-baths of 75°, or half-baths, and changing, later on, to short, cold applications, three half-baths, and three full washings a week. A strong patient may begin at once with half-baths and full washings, alternately with upper and lower wraps; at the same time he keeps in mind and carries out all the known hygienic rules—such as exercise out of doors, diverting conversation, and appropriate diet—in support of the water applications.

Kneipp Cure. HYPOGASTRIUM, INFLAMMATION OF THE. Apply the foot pack twice daily for an hour and a half or two hours. Local cooling compresses or hip-baths are also advised.

Kneipp Cure. HYSTERIA. This malady is treated similarly to the next above. As it is connected with poverty of blood and weakness of the nervous system, it should be treated first with the milder forms of the cure.

1. For the first three days the patient should walk, for a minute or two each day, on wet stones; but measures must be taken to warm the feet thoroughly immediately afterward.

2. The upper part of the body should be washed with vinegar and water in the morning, and during the day the walking on wet stones should be practised for several minutes. This course should be followed for a week.

3. The daily upper washing should be continued, and, in addition, a cold knee affusion should be taken one day and the walking on cold stones should be done on the next. This for one week, after which the washing of the upper part of the body with vinegar and water may be extended so as to include the abdomen, which should be rubbed vigorously. In this way the natural warmth will be increased. A warm hayseed compress on the abdomen, three evenings in the week, is also much to be

recommended. After a week, a lower compress may be tried twice a week instead of the hayseed compress. Internally, from six to ten drops of a tincture of juniper, or valerian root, should be taken three times a day on sugar. An infusion of water trefoil, centaury and wormwood, mixed together, may also be tried: and, as a change, an infusion of a mixture of yarrow, camomile and St. John's wort. Loss or weakening of the voice is sometimes a concomitant symptom of hysteria. If the voice fails altogether, the upper affusion will often restore it; if it is only weakened, the thigh affusion will be an excellent means of strengthening it. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. INDIGESTION, (Stomach out of Order). The stomach requires rest in the first place. See "Gastric Complaints." A tea must next be taken of white angelica root *(Angelica silvestris, L.)*. a cupful in three parts, one part to be taken morning, noon and evening. Tincture of gentian, from the well-dried, finely-chopped root of that name, mixed with brandy or spirit, is one of the very best stomachics

Kneipp Cure. INFLUENZA, OR EPIDEMIC GRIPPE; called also Russian catarrh. It is a very striking fact that so many people suffer now-a-days from the consequences of this disease, or have never quite recovered from it. One of the main causes of this result is that the disease in such cases has not been treated in a natural way. It was known fromerly by the name "Grippe." The country people, when attacked with it, usually went to bed, drank a few cups of warm tea, lay warmly wrapped up in two blankets, and consequently got into a very active perspiration. After two or three days the trouble was past and no after-effects were to be apprehended. The symptoms presented in late years by this disease, in its oft-recurring epidemic form, vary greatly,—with the resisting power of the affected patient in general, and with the nature of the disease in particular. A cold is undoubtedly the prime cause of it, and it occurs, therefore. chiefly in spring and in autumn, when the temperature often changes rapidly. Damp cold is above all favorable to the inception and spread of influenza. The enormous quantities of salicyl, antipyrin, phenacetin and antifebrin,—as well as a new specific, salipyrin, have been powerless to check the spread of the epidemic; medical science is helpless, and it is only the natural method of healing which has been successful, both as a preventive and in the treatment of the disease itself. Influenza declares itself by general lassitude, sleepiness or sleeplessness, heaviness in the muscles and joints, giddiness, cold sensation in the back; then follow more or less violent fever, catarrh of the nose, eyes, gullet, windpipe, or bronchial tubes, with which are frequently associated nervous pains of a rheumatic nature,

neuralgia, or gastric complaints; loss of appetite, too, is one of the regular symptoms. In light and moderate attacks of influenza the symptoms are exactly those of a violent cold for which the patient is unable to account. The attacks are often severe where chronic catarrh,—especially of the larynx, windpipe and lungs already exists, or where there is heart disease; also in the case of old and weak persons and of children,—who, however, are not so often attacked as adults. If such chronic affections are severe, or the weakness owing to advanced age is great, a cure can hardly be expected; but, in ordinary cases, recovery from influenza make take place within a week, or within a few weeks at most.

The after-effects of influenza, such as weakness of the heart, neuralgia and gastric complaints, are avoided by a timely and correct application of the natural method of healing, which is specially appropriate because of its salutary and marked action on the heart, the circulation of the blood and respiration. The superiority of hygienic treatment to other methods is more and more acknowledged on the part even of doctors of medicine. Prevention is better than cure, and prevention can be secured by hardening the body, and so enabling it to resist the disease. Against influenza, as against all other infectious diseases, that man is best protected who is accustomed to cold washing and a rational diet. The best means of cure will be to resort at once to a full steam-bath, followed by a cool, or cold, full washing; these should be repeated on the second or third day, or the patient should wash his whole body with cold water, mixed with one-fourth vinegar, every two hours and go to bed; if the attack is a slight one, the patient should also take good exercise in the open air to get well warmed. After the second or third whole washing an active perspiration usually ensues, and this insures the excretion of the morbid matter.—A peasant who was attacked with this disease at six o'clock in the evening, and treated himself all night as mentioned above, was well again in the morning at the same hour.—Full washings are thus the best remedy for this disease. The cure will be facilitated if tea of St. John's wort and yarrow, or sage and wormwood, is taken internally. Now and then, especially when there is high fever, half-baths are at once soothing and strengthening People, whose head nerves are weak, usually lose consciousness when attacked with this disease. In such cases, though the above treatment holds good, a little special attention must at the same time be given to the head. Cool, but not too cold, head compresses are applied from time to time, and renewed as they become warm. Instead of frequent full washing, the short wrap will then be well applied, and will probably have the effect of lulling the patient into a refreshing sleep, and thus

placing him upon the road to recovery. (See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. INSOMNIA. The best remedy is the cold partial, or cold hip-bath, for from five to ten seconds, taken either before going to bed or in the night upon waking and being unable to go to sleep again. This direction does not apply, however, to persons whose nervous systems are much weakened, as cold whole washings or half-baths taken immediately before going to bed would in their case have the effect of exciting the nerves still more, and making sleep impossible. For such patients warm whole baths, or from 95° to 100°, lasting from five to twenty minutes, are advisable. The patient should get into bed directly after the bath, without any intermediate application of cold water. Asthmatic people will often be obliged to take them daily, for months, if the fits deprive them of rest and sleep. But if nervousness is the sole cause, a daily full lavation, or, where the constitution is strong, an occasional Spanish cloak, often gives relief. Walking bare-footed, a daily knee affusion, or treading water every evening for some time, will often have the effect of permanently relieving this evil. If, however, the insomnia is due to nervous derangement, the result of mental overwork, three back affusions, and three partial baths, with full lavation, knee affusion, walking bare-footed and treading water, are applied in rotation each week. As in this affection the feet are generally cold, the treatment must, of course, begin with the lukewarm foot-bath, and its usual admixture of ashes and salt; duration, fifteen minutes. The patient should always get out of bed early in the morning for the full lavation, and return to bed directly afterward. Vinegar may be added to the water used. An hour after, when he is quite warm again, the patient may get up. The head steam-bath is frequently applied for insomnia, in combination with affusions, Spanish cloak, front and back compresses, short pack, and also foot pack when the feet are cold. In case of affections of the head being the cause of insomnia, a head steam-bath is the very first remedy to be applied. For determination of blood to, or congestion in the head, it is the proper remedy. But as in such cases there is usually too much blood in the head, and too little in the feet, and the latter are therefore cold, a foot steam-bath or foot pack should follow the head steam-bath. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. INTESTINES, CANCER OF THE. Boil some fenugreek to a pulp and introduce it into the intestine as an enema. Water applications suited to the condition of the patient should, of course, be employed to produce an action on the whole system, as in

protusion of the bowel. Decoctions of arnica, oak-bark and camomile, in combination with hip-baths, will be found very efficacious.

Kneipp Cure. JAUNDICE. Anyone suffering from a disordered liver, or from jaundice, should at once, if constitutionally strong, resort to the more vigorous hydropathic remedies, especially three short wraps a week; he should, moreover, mix with his food or with the first spoonful of soup, once or twice daily, some wormwood powder. A full washing immediately after getting out of bed in the morning, twice a week, is greatly recommended, and a cup of milk in the morning and evening, containing finely powdered wood charcoal, with or without sugar. Pulverized maple leaves are likewise to be taken, a saltspoonful twice a day.

Kneipp Cure. JOINTS, INFLAMMATION IN THE. Curd poultices, or better still, clay compresses, are the applications recommended for painful inflammation, when treated at once; but if it is of old standing, and the affected joint is stiff, then hot hayseed compresses, followed by cold affusions, will be preferable.

Kneipp Cure. JUNIPER CURE is the employment of juniper berries in the following way: The patient masticates and swallows four juniper berries on the first day, five on the second day, six on the third day, increasing the number to fifteen on the twelfth day, and then decreasing them again by one each day, so that the course occupies twenty-four days. This cure is strongly recommended to all who suffer from a weak stomach, and it is also advocated as a preventive measure against contagion. Those engaged in nursing or attending patients, and who might easily take infection, will do well to chew and swallow daily from six to ten of these berries. Unhealthy gases and fluids will thus be expelled from the system.

Kneipp Cure. KIDNEYS AND BLADDER, DISEASES OF THE. The kidneys are cleansed, as already stated, by sage (*Salvia off., L.*) tea, and more effectually still, if the infusion is made from equal quantities of sage and wormwood. Powdered sage, sprinkled on the food, has the same salutary effect as the tea. Centaury tea also acts admirably. The juniper cure is recommended, as well as tea of chicory (*Cichorium intybus, L.*). Two cups a day, one before breakfast, the other at night, will help to cleanse the kidneys, liver and spleen.

Kneipp Cure. KIDNEYS AND INCIPIENT DROPSY, AFFECTION OF THE. A swollen abdomen is usually a symptom here. A daily cold full lavation, chewing and swallowing juniper berries, and drinking knot-grass tea every day, frequently suffices for its suppression.

Knee and thigh affusions are applied eventually in turn with hip and partial baths. A short wrap should be given every second night.

Kneipp Cure. KIDNEYS, INFLAMMATION OF THE. A large plaster of soft curds, wide enough to cover the back, and deep enough to reach from the shoulder blades to the lower end of the spine, should be prepared and applied. When this is taken off, a cloth dipped in vinegar and water should take its place and be left on for two hours, renewed, however, at the expiration of each half hour during that time. A similar vinegar and water compress should be simultaneously, and under like conditions as to renewal, applied to the abdomen. If the patient is weak, the compresses should be followed by whole washings, two, three or four times a day, according to the degree of fever. But if the general condition is more favorable, the patient may take two or three half-baths during the day, each bath to be succeeded, after the lapse of half an hour, by a washing of the upper part of the body. A tablespoonful of rosemary wine should be given every hour, in order to produce a direct action on the kidneys. The wine is made by boiling rosemary in two parts of water to one of wine. A tea of sage, coltsfoot, and hips-and-haws, mixed, will serve as a substitute for rosemary wine, if the latter cannot be provided.

Kneipp Cure. KIDNEYS, PAIN IN THE. The cane-chair steam-bath, and the lower wrap are in the generality of cases recommended for this disease. Internally, sage, common knot-grass, dane-wort, the juniper cure. According to the case in hand, other water applications are, of course, employed, together with those mentioned. A mild diet is indispensable.

Kneipp Cure. KIDNEYS, WASTING OF THE, called also *Bright's Disease*, may be treated in the same way, if curable at all; that is, if the organs have not already been too much weakened.

If convulsions set in, a short pack should be given; cold if there is fever; or lukewarm, if the patient feels chilly. The packs may be repeated, with a whole washing in the interval. A tea of pewter grass may be added to those mentioned above, as suitable in this case.

Three tablespoonfuls of an infusion of knot-grass taken morning, noon and evening, will often remove *pain in the kidneys*. The action of this simple tea is often so marked that, in the course of a few weeks, or even days, a great deal of gravel, and sometimes small stones, will pass off in the urine, and all pain will disappear. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Knee Affusion. See Index.

Kneipp Cure. KNEE, SPONGE OF THE. If the trouble is merely local, and is taken in hand at once, it may be easily cured by clay-water wraps, which are managed thus: Take the required quantity of clay, wash the sand out of it, mix it with vinegar and water, spread it on coarse linen, and apply this like a salve to the affected knee. This should be done once or twice a day, the plaster being left on for an hour each time, and a whole washing taken every other day besides. Frequently sponge of the knee is the outcome of scrofulous conditions in the system, especially with children; frequently also it is accompanied by great soreness in the eyes. In such cases the treatment should be as follows: On getting out of bed, jump into a full bath for three seconds up to the neck, and, in the course of the day apply a warm fenugreek compress to the affected knee; leave it on for an hour, and immediately after its removal take a strong knee affusion. In the evening, tread in water for one minute and wash the upper part of the body. This treatment should continue for four weeks, after which the applications may be reduced by half. When at last the warm fenugreek compresses are discontinued, two half-baths and two whole washings a week may be taken as the conclusion of the cure. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. KNEE, TUMOR OF THE. A tumor, at whatever part existing, prevents sufficient blood getting to the adjacent portions, whether above or below it; they must, therefore, suffer in consequence and waste away. The prime consideration thus is to dissolve the tumor, and then to strengthen and regulate the circulation of the blood. The prescription, therefore, is: Twice daily a very warm wrap, with scalded hayseed (duration, four hours), applied to the swollen knee. The hayseed, however, having become cold after about two hours, the wraps are dipped again quickly in hot water and put on afresh. The rest of the body is washed once a day with water and vinegar, to give it tone. Internally, six juniper berries are taken daily, and a spoonful of milk every hour, which will promote digestion. Some time later, the warm hayseed wrap is applied only once a day, for two hours, and over night a cloth, with soft-boiled fenugreek laid on it, is put on the knee or wrapped round it. Knees and thighs must have, besides, an affusion with cold water daily. Juniper berries may be eaten during the entire length of the treatment. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Kneipp's Pharmacy. See Index.

Kneipp Cure. Lacyeal Tumor. See Index.

Kneipp Cure. LARYNGEAL PHTHISIS generally makes its appearance in connection with consumption of the lungs. Abscesses form at the vocal chords; speech is, therefore, nearly always hoarse, and there is very great difficulty of swallowing. In other respects, the affection displays the same symptoms as in chronic laryngeal catarrh. The treatment is as in phthisis.

Kneipp Cure. Lightning Affusion, see Index.

Kneipp Cure. LIMBS, SWELLING OF THE. Swellings of the legs and arms occur often to elderly people, and may be indicative of dropsy. The chief cause is weakness of the heart and impeded circulation. The first thing to do in such cases is to rid the blood of all impure matter and abnormal constituents. If the feet swell in the evening only, there is not much cause for anxiety; that may happen to healthy people. It is otherwise, however, when the swelling occurs in the morning, as it frequently does in the case of those whose avocations involve their sitting a great deal in the office or the workshop.

TREATMENT. One day, whole washing; the next, a washing of the upper part of the body only. After about a week, take in rotation a thigh affusion, a half-bath, and a full bath, on the first, second and third day, respectively; and so on. By that means the necessary excretion will be brought about, and the circulation of the blood will be regulated. After the second week, upper, back and full affusions may be taken, also in rotation; in the warm months of the year, two affusions daily, one on the lower, the other on the upper part of the body; but in the cold months only one affusion, or one half-bath, always in such order of sequence that the lower and the upper part, respectively of the body are treated on alternate days. Those who are unable to enjoy much exercise will do well to take one Spanish cloak and two short packs weekly for excretory purposes, that is to say, one of those packs on every second day, at bed time. Good fresh air by day and night, and easily digestible food facilitate a cure in these cases, as in all others. (See also pp. 734, 735.)

Kneipp Cure. LIVER-COMPLAINT. For enlargement of the liver a warm hayseed compress on the abdomen and partial baths, thigh and back affusions are greatly recommended. An infusion of juniper berries and pewter grass should be taken by turns.

If the patient is strong, a short wrap, or a wet shirt, or the Spanish cloak will be very effectual, while lower and upper packs will carry off morbid matter. Weakly patients should take a whole washing on the

first day, and on the next a half-bath in the morning, and an upper washing in the afternoon or evening. In addition to these washings, a compress should be applied over the inflamed liver once or twice a day, and should be left on for an hour and a half each time.

For ***all liver-complaints*** the various affusions, more especially thigh and back affusions, are capital remedies. But hip and partial baths, two of each weekly, must be taken as well. Upper and full affusions are applied only where the patient is strong, and even then the former of the two not before the second or third week. A person, desirous of keeping free from affections of the liver but being congenitally predisposed to it, should take three partial baths a week, which will be most effectual if taken directly after a walk, even though the bather should be in a perspiration. The chest is washed lightly and quickly during the bath, which, in winter, should last only three seconds, but in summer may be prolonged to from fifteen to twenty seconds.

The following internal remedies are at the disposal of the sufferer from a disordered liver, *viz.*, to drink daily two glasses of milk, each mixed with a spoonful of pulverized charcoal. Powder of American aloe leaves, moreover, may be taken, a few grains' weight twice a day. Strawberries daily, up to half a quart. St. John's wort *(Hypericum perforatum, L.)*, taken in the form of tea, acts particularly well on the liver. A small admixture of aloe powder increases the effect, which is evident in the urine, whole flakes of impure matter being frequently carried off in that medium. An infusion of sage with wine and water cleanses the liver, and using the same herb as a powder, with an equal quantity of wormwood, heightens the effect. Powdered sage, too, when sprinkled over the food like pepper, has the same result. Tea of centaury acts with efficiency. The cure with juniper berries is, to eat four berries on the first day, five on the second, six on the third, and so on till fifteen berries are reached; then the number is decreased daily in the same ratio down to five daily. Tea of the chicory plant *(Cichorium intybus, L.)*, one cup of it taken in the morning and another in the evening, cleanses the liver, spleen, and kidneys. Powdered wormwood *(Artemisia absynthium, L.)*, a pinch of which sprinkled on soup or other food twice a day, improves the gall, and keeps off jaundice, is also recommended. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. LOCK-JAW. On no account should force be used to open the mouth, as the under-jaw may easily be injured. The head steam-bath should be resorted to at once, and a short cold bath taken when the patient is in a copious perspiration. The cold bath should be followed by active exercise.

Kneipp Cure. Lower Pack. See Index.

Kneipp Cure. LUMBAGO. In this complaint the lower compress is applied twice during the day, as it strengthens the spinal cord and the spine more than any other remedy. In the case of sensitive patients who suffer from want of natural heat, it is best applied warm; the sheet is dipped in hot water, mixed with vinegar half and half. If the compress is applied cold it should remain on till it has become warm in the woolen pack; if put on warm, it should be changed every ten minutes and applied frequently during the day. This simple remedy is sufficient, and in most cases does away with the necessity of rubbing with tincture of arnica or spirits of camphor, auxiliaries which are used where the disease has assumed a serious character. If a powerful affusion be applied to the back, directly after the back compress, it will prove particularly efficacious; and if the patient has sufficient natural heat, such an affusion will suffice without the compress. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. LUNGS, AFFECTION OF THE. In all maladies of this kind where pulmonary consumption is likely to ensue, it is necessary to apply daily an upper and a thigh affusion, in turn with knee affusion and a hip-bath of five seconds. If the patient is already very weak, the water used should at first be cool or tepid. A cup of ribwort and ground ivy tea is to be taken daily. Thus for four weeks. Water applications must never be made in the evening, because they are too stimulating. Another prescription for affection of the lungs originating with pleuritis, which has been wrongly treated by medical men, is: a daily full lavation and thigh affusion, by turns with partial baths,—*i. e.*, one day partial bath, the next thigh affusion;—further, a short pack, twice daily for an hour and a half; to drink every hour a large spoonful of milk. Thus for three weeks, and after that half the number of applications for the next three weeks, that is to say, three full lavations a week, three thigh affusions or a partial bath, and every second day a wrap. The drinking of milk is continued.

An affection of the lungs of nearly twenty years' standing, which was cured in four months and which caused a great sensation at the time, was treated as follows:

Every day, morning and evening, washing the upper part of the body; next day a full lavation as well. Digestion being in a bad condition, small quantities of wormwood tea were given to improve it. A treatment of this kind naturally promotes expectoration and increases the cough. But the patient must not be misled by that. Three weeks later, both cough and expectoration will generally decrease. For the

next three weeks there followed daily a full lavation, and washing the upper part of the body, and, finally, by turns the last-mentioned application one day, and thigh affusion the next; on the third day a partial bath. With this treatment the chronic affection of the lungs was cured. This method is more especially to be resorted to, if, as is frequently the case, the stomach is the main cause of the affection.

In maladies of this kind the patient's natural heat must ever receive due consideration, for if too much heat were to be withdrawn from a consumptive person while he is shivering, his death would only be accelerated. Washing of the upper portion of the body and daily thigh affusion, in turn with partial bath, are in the majority of cases advisable during the first week. People who are not afraid of water may at once begin with upper and thigh affusions, the former even applied twice daily. But one of the former frequently suffices. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. LUNGS, CATARRH OF THE. Most affections of this kind are remnants of the orthodox medical treatment of inflammation of the lungs. The patient coughs a great deal and brings up much phlegm, sometimes mixed with blood. Treatment: Wash the whole body an hour before rising for good, and turn into bed again. Every day an upper affusion, or two such baths, if there is no lack of heat. Proceed thus for twelve days. For the next twelve days one upper and one back affusion daily. A cup of tea of oak-bark and a little pewter grass morning and evening.

The following is for a very obstinate chronic catarrh of the lungs:

Daily a cold lavation of the whole body, getting out of bed for the purpose an hour before rising, and going back to bed. A knee affusion, moreover, every day, as well as two cold short partial baths a week, lasting three seconds each. A cup of nettle tea, dividing it into three portions, for morning, noon and evening. Thus for about five weeks; and then another cold lavation four times a week, knee affusion twice, and cold, partial bath once a week. The use of nettle tea is continued. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. LUNGS, EMPHYSEMA OF THE. The treatment must be regulated by the patient's age and degree of vital force. As a rule, this affection is combined with asthmatic troubles. It usually happens that a person about sixty years of age, rather corpulent, and leading of necessity a sedentary life, suffers from difficulty of breathing.

In that case an excellent application is the upper affusion, employed twice daily, and a thigh and knee affusion. A hip-bath, besides, three times a week, on which days the knee affusion may be dispensed with.

The order of treatment would, therefore, be: In the morning knee affusion, about eleven o'clock a. m.; upper affusion, about four p. m. The same on the second day, except the substitution of a hip-bath for the knee affusion. Thus to continue four weeks, when obstruction by mucous matter in the lungs has been got rid of and action of the abdominal organs improved. From ten to fifteen large spoonfuls of water should also be taken within half an hour, adding five drops of the infusion of hips-and-haws, wormwood and juniper berries to each spoonful. This may be done twice a day.

With young people, and those of a delicate constitution, washing the chest with cold water, full lavation at night, drinking Kneipp cough-tea—a mixture of the leaves of wild plantain, colts-foot, and lung-wort in equal parts, three times daily, must be resorted to early. After a week one upper and one knee affusion are given on the first day, one upper and one thigh affusion on the second, upper affusion and hip-bath on the third, upper and knee affusion on the fourth, upper affusion and hip-bath on the fifth, upper and thigh affusion on the sixth, upper affusion and hip-bath on the seventh day. The same for three weeks. The body must, of course, always have the necessary natural heat, and the feet must never be cold or bloodless. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. LUNGS, HEMORRHAGE FROM THE. The patient must keep very quiet, and put on a lower wrap with a thick and very cold extra compress round the upper part of the body. The latter, when getting warm, must be re-dipped in cold water and renewed. Hot-water bottles must likewise be applied to the hands and feet, particularly when they are cold, which is frequently the case in this malady. The bottles, however, must only touch the outside of the hands and be kept away from the chest. Pewter grass at the same time makes an excellent tea for hemorrhage of the lungs and stomach, because of its astringent quality.

Kneipp Cure. LUNGS, INFLAMMATION OF THE. A pack from under the arms to the tips of the toes is applied twice a day, next a teaspoonful of sweet oil of almonds must be taken, and on the inflamed painful part a poultice of quite thin curds, spread to the thickness of the back of a knife, is put on every three hours. Kneipp's cough-tea should also be taken, half a cupful three times a day.

Kneipp Cure. LUPUS. According to the most recent experience, the following treatment has proved very successful in this dreaded disease, which requires that while special attention is paid to the affected

part, the general object of strengthening the whole system shall be kept in view.

If the physical condition of the patient is fairly good, a daily application may be prescribed, and, in addition, a hayseed shirt, or the Spanish cloak, once a week for alternative purposes. A beginning may be made with one half-bath early on the first day, to be followed on the second day by a full affusion, and on the third day by a whole washing; on the fourth day, a half bath, followed by washing of the upper part of the body, may be given in the morning, and in the evening either the hayseed shirt or the Spanish cloak; on the fifth day, a whole washing; on the sixth, a full affusion; and so on, repeating the course. If, however the patient is in a weak state of health, the applications should be proportionately less frequent, and the order about as follows: On the first day, a whole washing; on the third day, a half bath; on the fifth day, whole washing; and on the seventh a half bath. Perhaps on the tenth day, the hayseed shirt may be put on the evening, and repeated at intervals of four or five days.

The diet is here a consideration of the first importance, and dry food, or the whole-meal cure, is much to be recommended, at least as part of the whole regimen, which in other respects, should be chiefly vegetarian, the addition of meat being restricted to the midday meal once or at most twice in the week. Whole-meal bread, or rye-bread, should be toasted, then reduced, by rubbing or grating, to the condition of coarse bread crumbs, and three spoonfuls of these eaten twice a day. Or, a mixture of the various teas will prove very serviceable in these cases; particularly if very little of the material is infused—say at the most a small teaspoonful—and a couple of spoonfuls of the infusion is taken morning and evening. The tea should be changed every two or three days; at first oak-bark; then a mixture of wormwood, pewter grass, and tormentilla.

The exudation from the sores must be quickly removed and sores may then be dressed from time to time with powdered clay, which must not be washed off. For the first week the clay dressing may be given once a day; but after that at intervals of three days. An ointment made of clay, with wormwood and tormentilla added, may be applied as a change, instead of the clay powder. If the affected part is swollen, fenugreek plasters, used alternately with thin alum-water, will be found very advantageous. The complete cure may take a very long time; this will of course depend on the constitution of the patient and the severity of the disease.

A gentleman had lupus on the nose. He had twice a week thigh affusion, twice back affusion, once a wet shirt, had to walk bare-footed

every day, and the nose was rinsed three times a day with a weak infusion of pewter grass; the sore places were covered over at night with prepared clay. (Fine clay is made into an ointment with two-thirds water and one-third vinegar.) A head steam-bath was also given every two or three days, and a foot steam-bath after another couple of days. This treatment was continued for from nine to twenty weeks; but improvement was evident at the end of six weeks. Then there appeared in the face, and on the whole upper portion of the body, a fearful eruption. The lupus gradually healed and left only a scar behind.

But still more striking cases of cure of lupus in the face, on the cheeks and forehead, with children and adults, have frequently to be recorded; cases in which the affection was not of too old a standing. A child with lupus in the face was speedily relieved of the complaint by the Kneipp cure in the following manner: It was washed every day all over with cold water, and had a cold partial bath every other day, duration six seconds; poultices of fine clay and vinegar ointment were applied daily to the sore parts; and now and then head and foot steam-baths were given in turn. After six weeks the cure was complete. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. MALARIA. (Marsh Fever in Italy.) While other fevers generally come from within and affect the whole system, without causing much pain, malarial fever is exceedingly painful, and attacks parts of the body, the back, chest, legs, hands and feet, etc. Weakly subjects are very liable to it, and the mere dread of the fever is sufficient to bring it on. In combating it, the curative measures adopted should be such as will act upon the system generally, and the poisonous matter must be got rid of chiefly by perspiration.

The first remedy is the warm upper compress, which should be renewed every half hour. The artificial warmth so supplied, reinforcing the natural warmth of the patient, produces the desired perspiration, and the poison is thrown off. The greater the perspiration, the better. For the next three days, two cold whole washings should be taken daily, to keep up the throwing-off action, and to strengthen the body. Strong patients may have the cold wet shirt, or the Spanish cloak, instead of a whole washing. Small quantities of an infusion of centaury, wormwood, angelica root, or juniper berries, should be drunk; tormentilla is also to be recommended. The extracts of these plants, however, are better and more effectual than infusions. These extracts (tinctures) may be given separately, or mixed together—eight or ten drops in a tablespoonful of water on a piece of sugar. The last named tincture is

also the best remedy against sea-sickness. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. MEASLES. Twice daily a warm hayseed shirt covered with a blanket, duration an hour and a half. While the patient is very hot, he is quickly washed with cold water once or twice a day. For the rest, the treatment under "SCARLATINA" may be adopted.

Kneipp Cure. MENTAL DISEASES. With the increase of nervous diseases from year to year, the number of the mentally afflicted grows constantly greater, and in almost every country mad-houses have had to be enlarged and extended. The disease may be due to hereditary causes, to overwork, or to self-poisoning with alcoholic liquors; sometimes also to the intensified struggle for existence; and finally to extravagance and vice. The terrible disease of mental benightedness may be due to any of those causes: but most terrible of all—and this is unhappily, the bitter truth—is the fact that a goodly number of our insane owe their misfortune to ***medical treatment.***

"Sanitary Councillor" Dr. *Bilfinger* furnishes us with incontestable proof of this. He shows, after placing the facts before us, how a young medical student, full of promise, with a strong robust constitution, the pride of his family, was rendered a wretched imbecile after twelve months' confinement in a mad-house—the victim of a treatment with a medicinal poison which the State sanctions, and anything more destructive than which it is impossible to imagine. The ill-starred student led a most steady life, and was preparing conscientiously for an examination shortly to come off, when he interrupted his mental labors by a drinking bout. He had till then lived an abstemious and retired life, but as a result of his indulgence in alcoholic drinks on that occasion, he was suddenly attacked with acute raving madness. This would have been cured in a few days, with natural treatment; but the doctor who was called in directed that the patient should be sent at once to a mad-house, where Dr. *Bilfinger* afterward paid him a visit at the wish of the young man's parents. Dr. *Bilfinger* then ascertained that the young man had had ***every evening an injection of morphia.*** Both the attendant and the doctor confirmed this fact. Thus the poor wretched man had, from the very first, daily injections of this deadly poison, which naturally made him more and more dull-witted, while the miserable state of his nerves became more intensified every day. When Dr. *Bilfinger* remarked upon the unpleasant smell in the room, he learnt that all three patients in the apartment belonged to the "dirty" class; most probably in consequence of the use of this diabolical morphia. Complete mental derangement was, as already mentioned, the end of this promising young man! This,

then, is an instance how the unfortunate insane are treated now-a-days in asylums by privileged medical men! ***Bilfinger, Kneipp,*** and several other doctors and followers of the Kneipp method, tell us as contrasting with the above, of many cases where persons, far more deeply affected with mental disease, completely recovered in a very short time, and became clear in mind as before. The treatment varies of course with the condition of each patient. ***Bilfinger*** enumerates the following remedies: Firstly, rational psychological treatment on the part of doctor and attendants; secondly, non-stimulating diet; thirdly, fresh air; fourthly, special water treatment, in the form of cool trunk baths, or, especially for women, short, cold, half-baths, abdominal and calf-packs; in combination with steam jars and hot water bottles in bed; and later on knee and upper jet baths; last but not least, diligent walking bare-footed.

The first applications in all cases of mental aberration, when the feet are cold, are a warm steam-bath with wood ashes and salt, and a shoulder pack or Scotch compress. If the feet are not cold, a foot pack, consisting of a pair of wet socks over which dry woolen stockings are drawn, should be applied in combination with the shoulder or chest pack, and at the same time. Kneipp treated an absolutely insane girl with excellent result in the following way: Washing the whole body twice a week, with three knee affusions and as many warm foot baths, containing a handful of wood ashes and salt, in the evening before going to bed (duration of the baths, fifteen minutes); three times a week a pack reaching from the knees to the shoulders, wrung out in ***warm*** water and vinegar; morning and evening three spoonfuls of wormwood tea. Where the patient is not strong, an effort must be made to increase the natural heat, especially of the feet, and thus to infuse fresh life into the blood only. Knee affusions must be applied, and several warm three-quarter packs given alternately with two cool full washings. The before-mentioned unfortunate medical student being in possession of robust health, could have been at once treated with upper and thigh affusions, shoulder and foot pack, all quite cold. With six upper affusions, as many thigh and knee affusions, six shoulder and simultaneous foot-packs, four back affusions, four half-baths, six full washings, and perhaps four full packs besides, the poor fellow would have been restored to health by any "quack." Regarding our poor lunatics in the State asylums of Saxony (and similar conditions no doubt occur in all others), an attendant on mentally afflicted patients, who is well acquainted with the natural method of healing, said to me during a railroad journey to Colditz: "If I were allowed to treat our patients with the rational system, I should save many an unfortunate man, who would be discharged as perfectly cured and able to return to the bosom of his family."

That insane people should be treated in mad-houses in exactly the same manner as they would be at their homes by their own relatives, is the rightful wish of all, whether friends of, or strangers to the victims; and it is the conviction of most people. Is this, or can this be always the case, in view of the many hundreds of such patients confined in these asylums, and of the strictly military discipline enforced there? To our knowledge, the attendants, in male asylums at least, are chiefly men who have served their time in the army. At any rate, let us hope that fair treatment is on the whole accorded to this class of patients, in spite of many ugly rumors to the contrary current among the people.

We hold it, however, in the interest of these sufferers, who undoubtedly are the most wretched in existence, to be our duty, by the collection of material bearing on this subject, to get at the real truth; and, if we should discover that, instead of a gentle and compassionate (yet withal firm) treatment, the military spirit with its rough manner predominates, we shall not fail to proclaim it publicly in the proper way.

To the pious wish that the latter supposition may not prove true, and that it is therefore not justified, we join the request that the managers of such institutions will exercise the utmost care to ensure to the patients a treatment equal, in forbearance and gentleness, to that of the female attendants at the Alberta Asylum. We know that deranged people are generally more difficult to manage and to nurse than other patients, and we desire, therefore, in the interest of the nurses and attendants themselves, to see their number increased so as to secure for every patient the willing attention of his nurses, to the full extent which his case requires, and in the manner that humanity would dictate.

Kneipp Cure. MIGRAINE. In light cases wash the abdomen vigorously from two to four times daily for two or three days with cold water and vinegar, in addition to which the disease, in its chronic state, requires two or three partial baths a week. Drink caraway or fennel tea. In very obstinate cases, inherited often by the second and third generation, and sometimes of more than twenty years' standing, upper and knee affusions are applied three times a week, in turn with three partial baths. Walking bare-footed is also particularly efficacious in such cases. Should the patient be unable to ensure sufficient heat by exercise, a short or lower wrap may be substituted for the upper and knee affusion and lavation in bed for the partial bath. In this malady a meat diet must be avoided. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. MIND, DISORDERED. This kind of disease is frequently the transition stage between health and insanity. If the con-

stitution be weak, the warm foot-bath and shoulder pack are the first measures to apply; but if the constitution is strong, then the wet shirt is the best remedy. A coarse linen shirt is dipped in cold water, well wrung out, put on, and the patient is then covered up in bed with a blanket so as to admit no air. Duration of the pack, one and a half to two hours. Disordered fancies being, however, often the consequence of gases, which rise to the head, produce pain there and affect the brain unfavorably, five drops of lavender oil, taken on sugar twice daily, act with capital effect. A half-bath is best taken after a walk. The patient should have diversion of a suitable kind, to lead his gloomy thoughts into other channels.

Kneipp Cure. MUCUS IN THE LUNGS, CHEST AND WINDPIPE, ACCUMULATION OF. The applications indicated are: washing the upper part of the body, chest and throat compresses in turn with lavation of the lower parts. Tea of wild angelica, stinging nettles or their roots, a cupful divided into three parts for morning, noon and night. The accumulated matter is discharged in the urine. Lime or mallow blossom tea, as well as the infusion of chicory *(Cichorium intybus, L.)* acts on mucus in the stomach in the same way. A gargle, or tea, made of mullein *(Verbascum Schraderi Meyer)*, dissolves it effectively, especially when added to an equal quantity of black mallow.

Kneipp Cure. MUSCLES, ATROPHY OF. This disease may be either local or general. Muscles waste, because owing to unhealthy changes in the nervous system, they are not sufficiently supplied with blood. The main object, therefore, is to regulate the circulation. In many cases, the disease is the result of chronic illness and a consequent thoroughly bad state of the blood and fluids of the body; or this latter condition may be due to faulty nutrition, or to medical treatment with mineral poisons (as for instance mercury). The natural treatment consists in rubbing, bending and otherwise moving the wasted limbs, together with cold washings and affusions. If, as often happens, the muscular atrophy is connected with a spinal disease or complaint, regard should be had to the treatment prescribed under that head, and a radical cure undertaken in addition to purely local applications. If the natural heat of the patient is low, warm compresses should be used for a time at the commencement.

Kneipp Cure. MUSCLES, INFLAMMATION OF. Cold vinegar compresses, or other cooling applications, in the same form, of herbs which will have an astringent effect and relieve pain. But movement of the affected muscles is here an important part of the treatment, with

occasional affusions over the seat of the inflammation, whether it be in the hand, forearm or foot. Discharged matter should always be promptly removed. *Never lay ice on the inflamed spot.*

Kneipp Cure. NERVES, AFFECTIONS OF THE. Chronic affection of the nerves—with the symptoms of irregular pulsations, frequent palpitation of the heart, generally cold feet, giddiness in the head, failing memory, feeling of fear and trepidation, the patient starting at the merest noise—is treated successfully with the following applications: Wash the whole body every morning, before getting up for good, and return to bed to acquire warmth again; take three partial baths a week (in winter time these may be taken when the patient gets up, or at any other time of the day, with the only proviso that he takes measures to recover his warmth quickly). Walk bare-footed a great deal in winter, on wet stones, and out of doors, too; in summer in the garden or elsewhere in the open air. In order to improve and give tone to the stomach, undertake a cure with juniper berries and wormwood tea, in small portions. Thus for four weeks, and during the next four half the number of applications, coming finally to two or three partial baths a week.

Kneipp. Cure. NERVOUS AFFECTION WITH TEMPORARY LOSS OF VOICE. As a rule this is a ladies' malady, or at least of those who have suffered much from chlorosis.

TREATMENT.—One day, lavation of the upper part of the body on getting out of bed, and returning to bed afterward; on the next day, a partial bath; but walking bare-footed must be practised daily in the room, or on wet stones, for from five to ten minutes. This course to be continued for several weeks.

Kneipp Cure. NERVOUS DERANGEMENT AND INSOMNIA CONSEQUENT UPON MENTAL FATIGUE. Take a lukewarm foot-bath, mixed with salt and ashes, of fifteen minutes' duration, at night; wash the whole body with cold water in the morning an hour before rising for good; take a knee affusion in the course of the day, consisting of three cans full of water. Proceed thus for ten days, after which take a full lavation of the body; walk in water above the calves daily for two or three minutes; take a back affusion every other day for a week, and the same number of partial baths weekly. Continue this treatment for four weeks. Then, for the purpose of strengthening the system, take two partial baths and one full lavation a week; but only one back affusion in the same period; or walk on wet stones, in water, or on wet grass; in winter, for one minute, on fresh fallen snow. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. NERVOUSNESS WITH DETERMINATION OF BLOOD TO THE HEAD. For four weeks, take a full lavation every day and three partial baths a week, and walk bare-footed a great deal; next, four full lavations weekly for another four or six weeks every other day, and three thigh and one back affusion each week; walk in water daily for three minutes. Thus, therefore, in addition to the daily walking in water, there is an application for every day. At the end of the cure there is one only every other day; say, a full lavation to-day, to-morrow a free day, and on the day after to-morrow a thigh affusion; then another free day, etc.

All People Suffering with their Nerves will do well to accustom themselves to walking bare-footed, and to begin with it in summer either out of doors or indoors; also to taking air-baths in the room, and in the open; also to dipping the feet when they are warm into cold water for five minutes every day up to the calves; but if the feet are cold, to take a warm foot-bath with salt and ashes, and not to dip the feet in cold water after they are warm. Too warm clothing should not be worn. Two partial baths a week, and now and then a thigh affusion should be taken. As the back affusion does not agree with every nervous patient, it is to be used less frequently and rather with strong than with delicate people. All confining footgear, even the elastic bands of gaiters, are objectionable, for they impede the free circulation of the blood. Likewise tight collars and stays. Tobacco smoke, alcohol and mental over-exertion are to be avoided; a light, digestible diet, on the other hand, plenty of exercise out of doors, mountain climbing, and pleasant entertainment and conversation are advocated. People are seriously dissuaded from using water applications too frequently, one a day is sufficient; but, at the same time, monotony of treatment is warned against, as change is the great and main thing here. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. NERVOUSNESS WITH VERTIGO. Washing the upper portion of the body every day, three partial baths a week, in rotation with three thigh affusions, *i. e.*, to-day a partial bath, to-morrow a thigh affusion. If the patient is otherwise strong and vigorous, he may, in addition, wear a wet shirt, steeped in cold water and vinegar, once a week. One spoonful of wormwood tea should be taken morning, noon and evenings.

Kneipp Cure. NOSE, BLEEDING FROM THE. If the affection recurs at all frequently, in which case it may be a fruitful source of consumption, Kneipp recommended affusion on the upper part of the head.

An infusion of septfoil, pewter grass and shepherd's purse, two or three large spoonfuls a day, will do good; but the main thing is a general treatment.

Kneipp Cure. NOSE, VIOLENT BLEEDING FROM THE. Salted water, and the infusion of pewter grass should be drawn up into the nose. If that does not stop the bleeding, a can of cold water should be poured over the patient's head, neck and shoulders. The body must lie quiet and in a horizontal position. The douche just mentioned is to be repeated a few hours later, and the bleeding, however violent, will then cease. But it often happens that severe bleeding of the nose takes place during the monthly period of young females. Here the circulation is evidently deranged. Such patients have, as a rule, cold feet; it is clear, therefore, that the blood is all in the upper part of the system, and is wanting below. In these cases the following procedure is advisable: A warm foot-bath, with the addition of wood-ash and salt, is taken three times a week, for fifteen minutes each time; and every morning, on getting out of bed, a cold knee affusion, lasting only one minute, to the knees only and not to the feet. Two half-baths and two full washings, weekly, taken or given alternately for some weeks, will complete the course of treatment. The diet should be simple and nutritious; no coffee.

Kneipp Cure. Oak-Bark, Decoction of. See Index.

Kneipp Cure. Oat-Straw, Decoction of. See Index.

Kneipp Cure. OBESITY. The following course of water applications should be carried out: On the first day, thigh affusion; on the second, upper affusion; on the third, half bath; on the fourth, back affusion; the fifth, lightning affusion; the sixth, upper affusion; on the seventh day, a half-bath; then two of those applications every day; bearing in mind that a lightning affusion in the morning and a half-bath in the afternoon are the most effectual means of keeping down obesity. If the heart is weak, only the milder applications must be used. It stands to reason that a too liberal consumption of beer is not permissible. The daily allowance should not exceed two glasses, and even that should be reduced as soon as possible to one. Kneipp recommends a good, nourishing, mixed diet, such as is specially provided in establishments where the Natural Method of Healing is practised. To go hungry, or to eat almost exclusively meat on one day and vegetables on another, would be equally mistaken. See also pp. 734, 735.

Kneipp Cure. Packs. See Index.

Kneipp Cure. PAIN IN SWALLOWING. Gargle with water and honey (a teaspoonful of honey, boiled in half a pint of water). If no honey should be at hand, the gargle may consist of sage tea or alum water.

Kneipp Cure. PARALYSIS. Every part of the body is subject to this affliction. As a rule, the circulation is interrupted, and there is a want of blood and a feeling of coldness in the limb affected, with a corresponding congestion of blood in some other part. This state of things must be met at once, and affusions will be the best means to employ. If there is swelling, warm applications should be used in the form of hayseed compresses, steaming and warm fenugreek poultices, the herb being boiled to a pulp before being laid on. Cold affusions must, however, be given as well to the swollen parts. Wherever, in fact, coldness and weakness are felt, in consequence of the interruption of the circulation, there should be affusions energetically applied daily, while the rest of the body is not neglected; thus upper, in turn with back, full, knee and thigh affusions should be given in addition to the local applications. Later, two half-baths and a full bath weekly, each for a few seconds only, may take the place of affusions, except those which must be continued on the swollen parts and which should take the form of the lightning affusion. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PERITONITIS. This malady may be caused either by external injury or pressure, or by internal disorder, such as ulceration of the bowels or inflammation in the womb; or strangulated hernia may produce it.

Shivering; violent pain, particularly if pressure is exerted on the abdomen; starting; great thirst; nausea; frequent vomiting of green and yellow fluid; obstinate constipation; difficulty of breathing; flatulence, and constant desire to pass water, and, in the advanced stage of the disease, unconsciousness and delirium are the symptoms of this inflammation. The treatment consists in applying cold or warm compresses, which should be changed every half hour; compresses may be applied to the back and chest. Sipping water, enemata, lying as quiet as possible, and a milk diet, cold boiled milk, gruel or mucilaginous soup. If the inflammation has led to the discharge of matter and fever has resulted, a fever treatment must be observed as directed on page 440. See pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PHTHISIS. This is incurable when advanced to the third and last stage; nay, water treatment only hastens death, because the patient's vital force is unequal to struggling with it, and must

of necessity succumb. The disease, on the other hand, when still in the initial stage, and when not advanced too far—when, in fact, it is as yet in its second stage,—with intelligent treatment, is decidedly curable. Still, moderation is the great thing here; one application a day suffices, and this one is best made in the morning or afternoon, never in the evening, because the stimulation produced would rob the patient of the sorely needed night's rest. The following modes of treatment may be resorted to in succession, but one application only each day: one upper, one thigh, one knee, one upper affusion and a partial bath. Some patients, notably those who still continue strong, may likewise apply the pack and the full affusion once a week. Walking bare-footed, or treading water, practised only for a very short time, assists the cure materially; ribwort, wormwood and ground ivy are greatly recommended as salutary herbs for internal use. Where the digestion is defective, a cupful of ribwort, mixed with oak-bark, or ten or twelve bruised juniper berries will be sufficient for two doses, taken morning and night. Great attention must be paid to make children of consumptive parents, who are, therefore, congenitally tainted, hardy, and, by a proper diet, to enable them to get rid of all morbid matter. A hayseed shirt weekly, and the immersion of the child in cold water for a second, three or four times, are the means of attaining this object. Their most suitable diet will be a semi-liquid soup, made of bread; strengthening soup; light, digestible vegetables; fruit and whey-cakes, as made in Saxony. For the rest, see "EMPHYSEMA OF THE LUNGS," "PULMONARY CATARRH AND AFFECTIONS." See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PILES. Light cases are very soon cured with one or two hip baths daily, each lasting a minute or two; severe cases require more than that. There are often abdominal troubles, and hard bowels connected with the disease. In that case the treatment is as follows: Full washing, every day; two thigh affusions, two half baths, and two short packs a week. A month later, four full washings are given weekly, and alternately two thigh affusions, one half-bath and one pack. Internally a cup of tea of elder leaves. If the piles are very troublesome, a cold hip-bath is taken at once followed by a cold compress applied to the seat of pain. Kneipp also prescribes, with successful results, sitting for a quarter of an hour daily on a coarse linen cloth, wetted with cold water and four times folded (eightfold). The chief meal may here also be a mixed one, as indeed in most cases of the Kneipp cure meat with suitable vegetables is allowed for dinner. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PLEURITIS, PLEURISY. The foot pack proper is the first and most effective water application in various kinds of inflammation, as also in that of the lungs and pleura. It consists in putting on a pair of wet socks, and over them dry woolen stockings; renewing them after from one to two hours. At the same time, the painful parts are poulticed with thinned curds in their natural state, the poultice being changed three or four times daily. The curds are plastered on linen to the thickness of the back of a table-knife; they absorb the heat, soothe and relieve the pain in the most striking manner. After some improvement has set in, the following is the procedure: 1) Two warm wraps a week, each of short duration, with cloths or sheet which have been wrung out in water boiled with oat straw; these wraps will serve the purpose of solvents and absorbents of morbid matter. 2) Two upper and two lower cold compresses weekly, each lasting forty-five minutes; these also operate as solvents, and as tonics. 3) Upper affusion twice a week, and knee affusion or treading water daily. 4) A half bath every other day.—The applications 3) and 4) strengthen the lower and upper parts of the body respectively. As tea, one should drink daily one-third of a cupful of yarrow. St. John's wort and wormwood morning, noon, and evening. For cooling the system internally, a teaspoonful of good salad or sweet almond oil should be taken several times a day. Simple food, and strengthening soup, morning and evening. From six to ten juniper berries eaten daily besides, will act beneficially on the stomach and kidneys. See "LUNGS, INFLAMMATION OF THE." See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PODAGRA. Cold water is the best and only remedy for this malady, so greatly akin to gout and rheumatism. But it is just patients of this kind who most shun water, preferring warm applications which improve their condition for a short time, and soothe their great pain. Only those patients who are quite afraid of cold water should be treated at first with warm hayseed wraps, but cold affusions must always follow the wraps immediately. It will be best to manage the treatment in the following way (especially when the patient is suffering excessive pain, and when there is inflammatory swelling): The first thing in the morning, while the upper part of the body, which is probably sound, remains warmly covered up, the lower extremities are protruded from the bed, and vigorously douched with from four to six canfuls of cold water. In this case, however, the upper parts of the body have also to be washed with cold water sooner or later, in order that the whole body may perspire. Affusions of this kind may be given two or three times daily, but must always be followed by upper lavation or affusion. Great

pain must not, by any means, be admitted as a reason for foregoing the affusions; on the contrary, the more violent the pain, the greater is the necessity for applying more vigorous and more frequent affusions. It is only thus, that fire can be extinguished, and pain relieved or removed. The best plan is always to have recourse to affusions, directly the pain sets in. In obstinate cases, two full affusions, each of three minutes' duration, may be necessary, every day. A full affusion must in all cases follow a pack; and, as a general rule of the treatment, the painfully affected swollen limb should be energetically douched, while the rest of the body is washed; and the double treatment should be repeated once or twice every day. The application, in this disease, of bruised violet leaves is highly efficacious. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. POLYPI. The sufferer from this ailment, no matter in what part of the body it makes its appearance, should for a long time make use of a diluted decoction of pewter grass (water), in addition to any general course of treatment prescribed in such cases. If the polypus is in the nose, the pewter-grass decoction, or an infusion of the same plant, should be injected into the organ with a syringe, or sniffed up, two or three times a day. It stands to reason that any constitutional malady, from which the patient may be suffering at the same time, must be the subject of special treatment; that, for instance, a patient suffering from asthma should follow all directions given in this book under that heading. A neglected cold will sometimes become chronic; and it is generally under such circumstances that polypi form in the nose. Direct local measures will remove the formation, but it may be expected to renew itself. A cup of pewter-grass tea should be taken daily, for aperient and alterative purposes.

Kneipp Cure. POLYPUS IN THE ABDOMEN. This fearful disease, which occurs often with nervous, anæmic women, carries—when treated medically—many a mother to an early grave, or renders her sickly for life. Local treatment and operations do not, as a rule, lead to a cure, but only augment the pain and misery. If the case is not too far advanced, nature will here also aid herself, if adequately and rationally strengthened.

The malady will certainly not be cured in six weeks, but perhaps at soonest in as many months, and an after-treatment will then have to be carried out for a considerable time, in order to ensure a lasting recovery of health. The treatment, for the first two or three months, is as follows: The patient should get out of bed every morning for the purpose of having a cold, full lavation, and then return to bed for an hour.

A cold partial bath should be taken every day for five seconds, in order to increase the quantity of blood; a spoonful of warm milk should be drunk hourly, and a cup of pewter-grass tea daily. The second course of treatment, holding good for about four weeks, is: Three partial baths a week, and a full lavation every day; a spoonful of milk every two hours, and a cup of tea of pewter grass and St. John's wort combined, daily.

The patient must not allow his faith in the treatment to be shaken if after this regimen, carried out most strictly, the pains still gradually increase, and sometimes culminate in fainting fits. These are indications that sufficient blood is now circulating in the lower parts of the body, and that the system will shortly eject all that is morbid in it. It usually happens that the vigorous current of the blood carries the polypus with it. Pain and loss of blood are then soon over. As fresh formations of polypus are apt to occur, a strict after-treatment must be observed for some months, consisting in at least two partial baths and two full lavations a week, taken in regular rotation.

Be it mentioned at the same time, in connection with this female complaint, that **excrescences** in the abdomen have been by this simple method made to suppurate and to heal within four months, and without a surgical operation. A female teacher, in whose case eminent medical men had diagnosed an uterine tumor, and who had in vain invoked the aid even of some approved and efficient natural healers, wrote to Kneipp, and received the following instructions, written by himself: Four hayseed wraps a week, four knee affusions, and four full lavations. Continue thus for four weeks; and for the next four weeks, half the number of applications. The result was highly satisfactory. After blood-mixed matter had discharged for some time, there remained only one inflamed spot, which, by means of cold, wet abdominal compresses, two partial baths a week, and two full lavations, was soon completely cured. The woman is at this day hale and happy, and an enthusiastic admirer of the Kneipp cure.

Descent of the Uterus is likewise cured by a persistent Kneipp cure, often within a short time. The usual instructions are: Two upper lavations a week, three partial baths and a vinegar and water compress on the abdomen twice a week, the compress to consist of a cloth folded in four.

A Uterine Flexion, connected with rectal fistula, was cured by the following applications, although the patient had been repeatedly operated upon: First day, full lavation; the second, partial bath; the third, a short hayseed wrap; and the treatment thus continued for four weeks. A cup of tea, made of common pewter grass and St. John's wort, daily.

When the four weeks had passed, the tea was continued morning, noon, and night, in addition to two short wraps, three full lavations, and three partial baths a week. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. PURGATIVES. Sloe blossoms *(Prunus Spinosa, L.)* boiled for a few minutes, yield a decoction which, if a cupful be taken daily for three or four days, acts radically, but lightly, and without causing any inconvenience. As the most effectual and, at the same time, painless remedy, and one which produces no ill effects afterward, Kneipp recommended his Wühlhuber tea No. 1, a mixture which has for its object, on the one side, to strengthen, while weakening, on the other, by the carrying off of vitiated matter. The purgative action sets in from twelve to thirty hours after the tea has been infused and taken. Persons with strong constitutions can take a cup of Wühlhuber tea two days running, while weaker patients will do better to distribute one cup over two or three days. The recipe is as follows: One tablespoonful of fenugreek, one of powdered aloes, two of ground fennel, and two of crushed juniper berries; all well mixed, and kept in a tin box. One teaspoonful of the mixture suffices for one cup of tea if boiled for fifteen minutes and then poured off. The tea may be taken either warm or cold, and with or without sugar; best, at bed-time. Another purgative remedy is a tablespoonful of cold water taken every hour; or, just before bed-time and on getting up, the abdomen should be quickly washed with cold water. Knee affusion, or whole washings, and three cold hip or half baths, are recommended; and for obesity, a grape cure.

Sauerkraut is also an aperient. Plenty of stewed fruit, whole-meal soup, plenty of vegetables, oatmeal soup and gruel, and malt coffee as a beverage, are also recommended, with as much exercise in the open air as possible. For Modes of Application, see Index.

Kneipp Cure. RABIES. A person bitten by a dog which is supposed to be mad should at once steam the part, leg or arm; and, after that, apply a wet pack. People of vigorous constitution may then put on the Spanish cloak, cold; those who are not strong must use it warm. Produce perspiration, and give cold washing, by turns. The wound should also be washed frequently with warm water.

Kneipp Cure. RECTAL FISTULA. Two or three hip baths of a warm infusion of pewter grass or hayseed, weekly; likewise small enemata with the infusion of pewter grass and oak-bark. The Spanish cloak or abdominal pack, once or twice a week.

Kneipp Cure. RENAL COLIC, DUE TO CALCULUS. This most painful malady sometimes makes its appearance quite suddenly, and spreads so rapidly as to throw the patient into a cold perspiration. Two herbal hip baths daily of 99° (duration, from ten to fourteen minutes), followed by cold affusions, are here the first applications. Next come packs, dipped in warm vinegar, on the region of the kidneys, remaining on for two hours each; but renewed if they get cold within the two hours. If a treatment of this kind is continued several days, a warm hip bath is first given, then follows a cold lavation and warm wrap. If the urine—the passing of which is at first difficult, painful, and scanty (perhaps only by drops)—begins to flow more freely, thigh and back affusions may be proceeded with. A daily full lavation and partial bath may form the concluding treatment of this disease. If it were neglected to let the cold hip bath follow the pleasant, warm one, the penalty would be severe; for, independently of the fact that the cold application is the most excellent remedy for inflammation of the abdomen, it also acts beneficially on the bowels, so that the patient, after some straining, is able to get rid of hard fæces which were partly the cause of the pains he had to undergo.

Kneipp Cure. RHEUMATISM. See, in the first place, "ARTICULAR RHEUMATISM," "GOUT," and "PODAGRA." Acute rheumatism is cured in a short time, with proper treatment. The first thing is, to get the morbid matter discharged from the system, to effect which, arm, leg, trunk, or three-quarter packs must be applied (cold, well wrung out), according to the position and extent of the affected part, and the patient must get perfectly warm, lying in bed, covered with a warm blanket, from one to two hours. Full lavation may follow, and the affected part should then have a vigorous affusion; according to the circumstances, therefore, it may be necessary to give an arm affusion, or a leg affusion, or a back, or chest, or knee affusion, or even a full affusion. As slight fever usually sets in in the evening, a partial bath at that time is recommended. The part attacked with rheumatism may be packed again for the night. A patient with a robust constitution may begin at once with upper and thigh affusions, in rotation with back and full affusions. The Spanish cloak, cold of course, is put on at night. For weak patients a daily full lavation, packing the affected limb or part, and a partial bath, are sufficient. In order to guard against any rheumatic attack, the best thing is, to harden the body by two full lavations and one partial bath a week; besides wearing suitable clothing. Rheumatism, when no other remedy will serve, is frequently relieved by stroking or beating the affected part with fresh stinging nettles for a minute. The Natural Method of Heal-

ing is usefully seconded by wraps, or shirts, dipped in a decoction of hayseed. Embrocations of spirit of camphor (a piece of the latter, the size of a hazelnut, dissolved in half a pint of the former) or camphorated olive oil (a piece of camphor rubbed in oil of almonds or olives till it is dissolved) are also good and beneficial remedies.

In all cases of rheumatism, it will be well to wash or rub the seat of pain—if the patient can bear it—with vinegar water (a cupful of vinegar in a quart of water) now and again. Three such washings should be given daily when rheumatism is first felt. The oil of lilies, used as an embrocation, is also an excellent remedy. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. RICKETS. This is one of the most difficult diseases to cure, the whole body is affected, and not only single parts of it, but the muscles and bones just as well. Much depends on the degree of weakness to which the child is reduced. For a very weak child the following may be the treatment: To put on, every other day, a shirt steeped in a warm infusion of hayseed, a blanket wrapped over it, and the child covered up in bed. On the days when it is not packed the child is dipped quickly for two seconds into cold water once a day. The same process is observed for some time. With the increase of the child's strength, the three hayseed wraps are reduced to one a week; while three cold full washings and three short full baths or dips are given. If the child is not altogether too feeble, it may be packed daily in warm, scalded hayseed for an hour or an hour and a half, and then quickly dipped into cold water.

Father Kneipp has initiated another treatment of late: He orders on the first day a warm oat-straw water bath; on the second day a shirt dipped in warm oat-straw water; on the third, he dips it quickly in cold water up to its neck; and so continues the course of treatment till a cure is effected. A saltspoonful of bone meal, so valuable in forming blood, is given twice a day, with a very light, digestible diet. Acorn coffee, with honey and milk (or malt coffee with the same addition), strengthening soups, and simple puddings. With such treatment a good result cannot fail to ensue. It will, of course, require several months, and meanwhile the effort to harden the body, by full washings, half baths, pure air by day and night, light and sun, must be kept up for a long time. It costs a great deal of trouble, but no doctor's or chemist's bill. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. RUPTURE. The abdomen should be washed frequently with vinegar and cold water, vinegar having a constrictive power of its own. Two hip-baths and two half-baths should be taken weekly.

and internally one or two tablespoonfuls of oak-bark tea, morning and evening. It is advisable also to apply compresses of oak-bark tea and vinegar over the rupture. When rupture occurs in infants, it is generally due to excessive crying. In their case also the above hydropathic remedies are equally applicable.

Kneipp Cure. Sandales. See Index.

Kneipp Cure. SCABIES. (The Itch.) TREATMENT.—A warm bath of the temperature of 108°, and the whole body to be well rubbed with soft soap during the bath. This should last about fifteen minutes, and be followed by a cold or warm washing, with ordinary soap. These measures may be at once repeated on the first occasion, and should be continued for four days more. Beds, clothing, and underwear should, of course, be changed and thoroughly cleaned, as the itch-mite is easily transmitted.

Kneipp Cure. SCARLATINA. The principal object in treating this disease being to draw the poisonous substances freely from the body in the form of eruptions, it will be best to begin by putting a shirt steeped in warm, salted water on the child; then to wrap it in a blanket, and take it to bed. After the child has been in the pack about an hour, the shirt is taken off, and a dry one substituted, and the child is put to bed again. No long time will now elapse, before the spots on the body become larger and larger. The application of the warm, salt-saturated shirt is repeated, and the dry shirt follows as before; this may be done three times; after which all the poisonous matter will have been brought to the surface. The disinclination for food demands dietary management, and when the appetite returns, light, but nutritious soup must form the staple of the nourishment given. If the child is thirsty, it should have water by spoonfuls only, but raspberry juice or the boiled juice of other fruit, left to stand till cold, may be added to the water.

But the cure may be well accomplished by cold treatment. A rapid lavation of the whole body, or a short bath and the immediate return of the patient to bed without any previous drying, is the right process. It should take place at first every half hour, and later every hour; finally, when the fever heat has abated, once every three hours. This draws the morbid matter to the surface, and moderates fever. There should follow daily, after this, one or two full lavations, according to the degree of fever present. It must be observed, in connection with the treatment of children described above, that the shirt is only once immersed in salted water; in the repetitions of the treatment, the water used should have no salt in it, for fear of irritating the sensitive skin of the child.

Weakly children should have a warm hayseed wrap in turn with not too cold short baths (temperature about 73° to 77°), and should drink daily two teaspoonfuls of oil of sweet almonds or good olive oil. Children should have about ten drops of it on sugar. An infusion of St. John's wort—or honey water made by mixing a large spoonful of honey in a glass of water—is an excellent drink. If, however, neither one nor the other is at hand, the patient is given now and then a teaspoonful of fresh water, but never too much at once. See also "DIPHTHERIA" in Index; also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. SCIATICA. (First case.) A corpulent gentleman, aged forty, was attacked in autumn with extremely violent sciatica. His face was full, but his legs were weak in comparison to the upper part of his body. As he was so corpulent, a short pack was the first remedy applied, in order to relieve the accumulation of blood in the abdomen, and to prepare the system for the affusions which were to come. They followed in the form of thigh, back, and upper affusions; with half baths, in various combinations and alternations with full affusions; treading in water, and diligent walking bare-footed. All these measures were employed in the following order: First day, back and thigh affusions; second day, upper and thigh affusions; third day, full affusion; fourth day, like the first; fifth day, upper affusion and half bath; sixth day, like the second; seventh day, back affusion, walking bare-footed a great deal during the day, and treading in water in the evening. Under this treatment the pain disappeared after a few weeks, and the even circulation of the blood was restored.

(Second case.) A woman, between forty and fifty years of age, was seized, in the autumn, with sciatica in the left hip, which made it impossible for her to walk. The pain, when she put her foot down, was very great. The hip-joint and the left foot were swollen. She was treated with upper, thigh, and back affusions alternately, and after a fortnight could walk tolerably well. Some pain lingered in the swollen hip, but that, too, disappeared in another fortnight.

Patients who are not corpulent do not require the wrap, and the treatment begins at once with cold affusions.

(Third case.) A gentleman, sixty years of age, had been suffering for a year with the most violent pain in the outer and inner sides of both thighs. At last, as all sleep was banished by the dreadful pain, he had recourse to the water cure. He first had full washings, as a preparation for the affusions; then, every day two water applications, in the following order: Thigh, back, upper, back affusion; half bath, back, upper, thigh, back, full affusion, and half bath; the one application in the morn-

ing, and the other in the afternoon. At first there was apparent aggravation of the symptoms, but within a fortnight the patient had made considerable improvement, and in six weeks he was quite well.

Kneipp Cure. SCROFULOUS CONDITIONS are best combated by wraps and shirts immersed in an infusion of hayseed, in combination with the other remedies employed in the Natural Method of Healing.

Kneipp Cure. SELF-ABUSE. Mr. *Just*, who, besides being a schoolmaster, is an excellent natural healer, writes on this subject: "This fearful vice, which is far more prevalent than is currently believed, is one of the principal causes of increasing degeneration and nervousness. Parents and teachers should be far more watchful over their charges, in order to prevent the commission of this terrible wrong, and to nip it in the bud, where it exists owing to youthful ignorance and thoughtlessness. It is a great mistake to leave growing children in ignorance of sexual matters, by maintaining a scrupulous silence, for the poor, unfortunate victims complain afterward when the evil, already in a more advanced stage, is explained to them, 'Oh, nobody told me anything about it!' Luckily, the sterling Natural Method of Healing offers here, as in other instances, the only right road to the recovery of health, or the strengthening of the body. Before, however, entering upon a description of the cure, we must remark upon the mischief which is done by the vast trade in secret remedies carried on in connection with this secret vice, and by which, in the most vulgar manner, capital is made of the frailties of the poor, pitiable victims. Every penny expended on these drugs is utterly thrown away. The quacks know well that the unfortunate patients who fall into their clutches observe absolute silence, even when complete failure has attended a treatment of many months, and after the useless expenditure of great sums of money. The quacks, we say, knowing this well, do not in the least mind the cost of advertising, and week by week give unblushing publicity to their nefarious trade in the most widely circulated newspapers of the capital, as well as in the smallest paper of a country town. Five dollars spent in advertisements will bring in fifty dollars, these reckless swindlers calculate. As the onanist is troubled also, more or less, with involuntary loss of semen, in proportion to the period during which he has been addicted to the vice, a loss, too, which keeps weakening him constantly, as may easily be imagined, and frequently renders him quite unfit for any mental or bodily occupation, so also the treatment with water must vary according to the circumstances of the case. Light forms of the disease are curable in four weeks; more obstinate ones, which have entered the

chronic stage, often require three months and more, before the weakened and reduced constitution can be restored to its pristine vigor.

Kneipp prescribes, in the less serious cases, first and prepartially a vegetarian diet, daily full lavation, and weekly two or three partial baths. The latter may be taken in the evening. But both these applications must be in the Kneipp fashion; *i. e.*, the water very cold and the partial bath very short, about five seconds, and the body must not be dried with a cloth or towel. The following course will then suffice for complete restoration to health: In each week two partial baths and as many full lavations in rotation, distributed over four days in the week (one day, full lavation; the next, partial bath), and daily walking in cold water up to the calves for three minutes. Where the affliction is so pronounced as to entail, as sometimes is the case, the involuntary discharge of semen as a consequence of the mere washing or hip-bath, great caution must be used. The system so weakened must first gradually be accustomed to the water, and the treatment is as follows: The patient should stand in cold water for one minute, but only up to the ankles; this rule should be observed for a week; the same during the week following, but the water should reach the calves. In the third week the water should extend to the knees, and time not exceed two minutes. Only then may full lavations and partial baths be resorted to; one day, one of the former; the next, one of the latter; besides walking bare-footed and in water every day. Spirituous liquors of every kind, and stimulating food are to be avoided; but moderate bodily exercise in the fresh air, without incurring fatigue, is necessary. In this way, even those who were already on the brink of despair, and harboring thoughts of self-destruction, will be restored, after not too long a period, to a state of health. It will be advisable to take a spoonful of warm milk now and then, and to carry out for a time the frequently mentioned juniper cure. Thus water, cold water, will, in most cases, cure this widespread malady, with the evils which result from it—emaciation, exhaustion, ruined digestion, impoverishment and decrease of the blood, failure of memory, loss of hair and often also of teeth, weakness of hearing and sight, nervous tremor and palpitation of the heart, cold and clammy hands and feet. The number of suicides in the year would at once decrease by thousands, and the lunatic asylums would be less full, if the wretched victims of youthful indiscretion were treated by the natural method. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. SEMEN, INVOLUNTARY LOSS OF. This infirmity may occur also without the patient's indulgence in the vice of self-abuse, but it is a grievous mistake to think lightly of it, and to take it to be

a natural occurrence in the unmarried state. It is at all times a sign of debility, and a healthy person is never troubled with it.

The form in which water applications shall be administered is determined by the degree of urgency of the symptoms, and by the season of the year. In the cold months three half baths and six washings of the upper part of the body will suffice during the week, so arranged as to provide for one such washing daily; and a half bath, lasting three seconds, every other day. It must be borne in mind that the upper part of the body, particularly the brain and spinal marrow, has been weakened, and that the main object of the treatment is to re-invigorate those parts. In summer a beginning may be made with the half bath, taken nearly every day, in conjunction with occasional short full baths; that is to say, the half bath may last three seconds, and the body may be immersed for one second up to the neck, the arms being also covered for that time. Further, the upper washing should be given every morning, except when a full affusion is preferred instead of it, for a change. The latter may now and then be combined with a head affusion, in order that the brain, the weakest part, may thereby be strengthened. The hair, on such occasions, should be quickly dried. At the end of the course, two or three half-baths a week will be sufficient, and the evening will be the best time to take them. If the patient will carry out this cure correctly, while living a steady life, and dieting himself carefully and well—eschewing coffee, and reducing his consumption of alcoholic beverages to a minimum, if not giving them up entirely— and if he will, particularly in the winter evenings, keep to good, strong, brown soups, he will soon be rewarded with success. But perseverance will be necessary, as well as courage and self-denial; and sacrifices are well worth making for the sake of health. As this disorder is transmitted to children, the same course of treatment and the same rules of diet will hold good in the case of children. Innocent victims of inherited evil will thus be relieved by the hardening of their constitutions; their nervous system will be strengthened, and they will be provided with a charm against the diseases incidental to childhood. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Shawl. See Index.

Kneipp Cure. Short Wrap or Pack. See Index.

Kneipp Cure. SICKNESS AND VOMITING. See, in the first place, "INDIGESTION" and other gastric troubles. Tea of peppermint and water mint, or a powder of the same herbs, daily, a few grains in water or with the food, are efficient remedies for this complaint.

Kneipp Cure. SKIN, SORENESS OF THE, caused by riding on horseback, sitting, lying, etc., must be treated with local and full lavations, in turn with compresses on the healthy surrounding part. It is also advisable to apply oil of sweet almonds, or olive oil, to the sore place.

Kneipp Cure. SMALLPOX. This dreaded scourge is nothing but an eruption with large, virulent ulcers. Kneipp, who had the disease himself, was cured in the following way: He took a half bath; then washed quickly and lightly the upper part of his body; went to bed, and covered himself up. He soon got into a perspiration; then repeated the process about eight or ten times in succession; and when, in the doctor's opinion, the smallpox really began to break out, he was already cured. Here the main thing is, at the very outset to take full washings, or half baths with washing of the upper part of the body; then to go to bed, to perspire, and to repeat this whole process, according to the patient's condition, from six to eight times; but packs, Spanish cloaks, and head steam-baths are also strongly recommended to smallpox patients. This disease, so much dreaded nowadays, will have, under the above simple treatment, a favorable course; stringent regulations against contagion are, therefore, superfluous. The so-called "protective vaccination" was characterized by Kneipp as "the greatest wrong which has been done to mankind." (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. SOPORIFICS (Aids to Sleep). All artificial soporifics destroy the health. The most active narcotics, therefore, find no place in the Natural Method of Healing. The first among the natural aids to sleep is a well-regulated diet; the second is a degree of occupation proportioned to the bodily and mental strength of the individual. According to the analysis of *Preyer*, the principal product of the decomposition set up by the action of the central nervous system is lactic acid, which, as it is the most important product of fatigue, should in its turn produce sound sleep. Other specifics for healthy sleep are, the abdominal pack, abdominal compresses, the half or the full bath, hip baths, rapid ablutions of the whole body—all cold, of course. One of the best soporifics, then, is lactic acid, in the form of thick or sour milk. The evening meal should take place at least two hours before bed-time; it should be as simple as possible, and should always include fruit. Treading in water, or the cold foot bath, is also a good sleep producer for people who are fairly strong. For anæmic, nervous persons, whose feet are always cold, a warm foot bath, or full bath, lasting about a quarter of an hour, is recommended.

Kneipp Cure. SORE BREAST. Warm compresses soaked in a decoction of pewter grass, and changed every half hour; occasionally also soft curd compresses will be found very effectual. See also Index.

Kneipp Cure. SOUP, STRENGTHENING. This soup is made of stale, whole-wheat bread, or any other coarse rye-bread. The bread is grated, and three spoonfuls of it are stirred into boiling broth or milk. Boiling water (it must be boiling) may likewise be used instead of broth; and in that case some beef-dripping and spice, or butter, are added. Many like the soup best made in this way. Some onions are fried in butter, and both are poured into the boiling water, in which the grated bread crumbs have already been soaked. The whole is then boiled up together and served.

Kneipp Cure. Spanish Cloak. See Index.

Kneipp Cure. SPASMS, FITS OF SPASMS AND MORBID CONDITIONS. Tea made of silver weed *(Potentilla anserina)* is the best remedy for spasms of the stomach and abdomen, and even for tetanus. The patient must drink three times daily warm milk, in which silver weed has been boiled. There may be applied with it, to the places attacked by spasms, warm compresses, immersed in water, with which the same herb was previously scalded.

For Spasms in the Head and Neck, steam is employed. If the abdomen is the seat of pain, a cane-chair steam-bath should be taken; but the wet shirt is a good remedy, too, to relieve conditions of this kind.

For Spasms of the Stomach, two or three short, warm hayseed wraps a week, and every other day a partial bath for three seconds. Internally a cup of tea of silver weed and wormwood, nourishing diet, but no tea, coffee, beer, or wine.

Spasms of the Uterus, and Fluor Albus. (The Whites.) Walking on wet stones, early in the morning; a cold, full lavation in the evening, before going to bed; and two cold hip baths weekly (duration, one minute each). Thrice in the week a four-fold linen cloth, dipped in vinegar and water, and wrung out, should be laid on the stomach, and left there for an hour, covered with a woolen wrap.

Spasms of the Chest, Combined with Cramp in the Arm and Foot. Workmen are frequently exposed to these attacks, in consequence of too great exertion, or through taking cold. One upper and one knee affusion daily, three partial baths a week, and in the evening before going to rest, according to the time of year, walking for from five to fifteen minutes

bare-footed in the garden. The complaint will yield under this treatment.

For Fits, Coming on Suddenly, in consequence of some fright, or of sad intelligence received, a daily full lavation, and three partial baths a week. Simple diet, avoidance of all spirituous liquors.

In all Spasms of the Abdomen, hayseed hip-baths and warm wraps over the abdomen, together with tea of silver weed, are recommended, as well as warm foot-baths in the evening, followed by cold lavations. The infusion of yarrow, St. John's wort, camomile and fennel, mixed together, may be drunk in the evening, to the extent of three large spoonfuls.

For Spasms of the Heart, the short pack, wetted with vinegar, must be applied to the abdomen, and tea of silver weed should be taken internally.

Also valerian root as a tea, or in the form of powder, has an excellent effect by expelling wind. Camomile tea produces a like result. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. SPINAL COMPLAINT. This malady, which so frequently ends in spinal consumption, is either completely curable, or capable of considerable mitigation by the water cure, unless it is too far advanced. A patient, who lived near Dresden, was already obliged to keep to his bed, but after a six weeks' course he was able to walk about his room with the help of a stick, and soon afterward to get out of doors. Four months later he was still using a stick, it is true, but was much better than he had thought, at the beginning of the cure, he could ever be, considering that he had previously tried every possible remedy in vain. The treatment was as follows: During four weeks seven full lavations, two thigh, two knee and two back affusions weekly. For the next four weeks, a full lavation and daily one of the above applications by turns; thus, to-day, thigh affusion; to-morrow, knee affusion; the day after, back affusion, and so on, repeatedly; after which three back compresses a week, and walking bare-footed daily A third set of instructions was: Weekly three back compresses, two partial baths, two full lavations, and again the before-mentioned affusions: thigh, knee and back affusions, and one upper affusion, every week. Walking bare-footed had also to be practised continually. So on for four more weeks, by which time the patient had found out which applications suited him best, and was using one of them every day in turns, but so that not a day was missed. The forms which generally prove most

suitable and strengthening are two partial baths, two back affusions, two thigh affusions, with three lower compresses a week. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. SPINAL PARALYSIS IN CHILDREN. Months, or often a year, may pass before a child is completely cured of this disease, the time entirely depending on whether it is an acute or chronic case. One leg is usually somewhat shorter and considerably weaker than the other, and the foot belonging to it, in consequence of not receiving a sufficient amount of blood, gets crooked and wastes away. In conjunction with a nourishing diet the following should be the treatment: First, the patient must be kept in bed for the first week or fortnight, in order to ensure rest and quiet for the affected foot; two thigh affusions, with one hayseed pack on the affected foot, should be given daily. But the upper part of the body must not be neglected; daily lavations, therefore, of that part are required. Thus for three weeks. Second course: Every day a thigh affusion in the morning, treading water daily, upper and back affusion, every other day in turn, and washing the whole body with vinegar every evening. The same for three weeks. Third course: Three thigh affusions, three full lavations, three upper affusions and two foot packs (with cold water and vinegar) for one hour. The same for three weeks. Fourth course: Three upper lavations, four partial baths, and one cold foot pack (duration, one hour). Fifth course: Two full lavations, three partial baths, one hayseed wrap (one and a half to two hours) to the feet. It is very frequently the case that children thus affected are constitutionally very delicate and have very weak cranial nerves, particularly where the weakness is inherited. Careful attention, therefore, must be paid to the upper portion of the body from the commencement as well as to the lower part, and walking bare-footed, first in the room, and afterward out of doors, should be practised assiduously. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. SPINE, CURVATURE OF THE. This affection, occurring, as it does, so frequently in children, is often due to the fact that that, by reason of imperfect nutrition, their bone substance is too soft; more particularly is that the case when they are carried about in a crooked position at a tender age, or are prematurely induced or forced to walk. Good nutritious diet, consisting often of nothing more than strengthening soups, given three times daily with rye-bread, is the principal thing in combination with appropriate treatment. Very anæmic and weak children should have, besides, a spoonful of milk every hour. Application: Hayseed shirt, twice a week; take the child

every day from its warm crib, immerse it in cold water for a moment and put it back. For other children, weekly three back affusions, while in a suspended position.

Kneipp Cure. SPLEEN, SWOLLEN. Apply compresses over the swelling, of hayseed water, vinegar and water, and oat-straw water, in rotation.

Strong patients may, in addition to the compresses, take two half-baths, one thigh and one back affusion, and two whole washings every week, one application on each day. Weak patients should take a whole washing every second day. A herb powder, taken internally, will be very efficacious in these cases. The powder should be prepared and used thus: Take some sage, wild plantain and stinging nettles; dry them well, reduce them to powder by rubbing and pounding, and take three spoonfuls daily in soup. Two cups daily, one taken in the morning fasting, the other before supper, of a tea of lungwort, cleanses the liver and spleen, and carries off morbid matter in the urine.

Kneipp Cure. Steamings, especially applied to severely affected parts. See Index.

Kneipp Cure. STIFF NECK. Whoever remains long in cold rooms, or in ice chambers, is liable to be troubled with this complaint. It is a very painful form of inflammation, and sometimes epidemic. The first step in the treatment is to take a cup of an infusion of daisies, and a tablespoonful of the same every hour afterward. It is a tea much to be recommended in all kinds of cramp. A hot throat-wrap should be applied next, or quite hot shawls, and these should be renewed every three or four hours, as often as they get cold. In addition to the above, three whole washings should be taken daily, and each of these should be followed by a hayseed shirt, worn until perspiration ensues. Later the patient may take a half-bath, if he is strong enough to bear it.

Kneipp Cure. STOMACH, AFFECTIONS OF THE. Tincture or tea of wormwood, or its powder, expels wind, as already mentioned; corrects and aids the gastric juices; promotes appetite and good digestion, cleansing the stomach at the same time. (A cupful of it now and then, but not every day.) Tea or powder of angelica has a similar effect. See "OBSTRUCTION BY MUCOUS MATTER." Euphrasy *(Euphrasia officinalis, L.)*, taken as a tea, stimulates digestion and improves the gastric juices. Tea of bitter, or water trefoil *(Menganthes trifoliata, L.)* produces a like result. Roots of the yellow gentian *(Gentiana lutea, L.)* well dried, chopped finely, and soaked in brandy or spirits in glass bottles, will furnish one of the very best stomachics. From twenty to thirty

drops of it are taken in six or eight large spoonfuls of water every day for a length of time. For indigestion, a teaspoonful of this extract in half a glass of warm water, or tea of chopped gentian root, does the same excellent service. For foul gases and vitiated juices in the stomach, oil of cloves is recommended, from four to six drops once or twice a day. For troubles of that kind, fasting is altogether the principal thing. Food ought to be taken only when the stomach asks for it. The water treatment should be as follows: Warm hayseed compresses on the region of the stomach, followed by cold lavation of the stomach. Warm foot-baths, and a full cold lavation are strongly advocated, too; above all, however, an immediate supply of fresh air by a walk out of doors. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. STOMACH, CLEARING OUT OF THE, WITHOUT TROUBLE. From five to ten grains of powdered aloe, boiled with a teaspoonful of honey, as a mixture; or about five grains of powdered aloe, enough elder flowers, for two cups of tea; about ten grains of fenugreek, and a teaspoonful of fennel; two cups of tea to be made from these materials, and taken within the space of two days. This infusion takes effect only after from twelve to thirty hours, acting not as a violent purgative, but only by promoting more copious stool. See also "PURGATIVES."—Elderberries stewed with sugar, or, better still, with honey, a spoonful stirred into a glass of water, clear out the stomach, act at the same time on the kidneys and afford, besides, a cooling, refreshing drink. Rosemary tea, two to four large spoonfuls taken morning and evening, acts quickly, as does likewise sage tea *(Salvia off., L.)*, or, better still, sage and wormwood combined in equal parts. The same effect is obtained by powdered sage, sprinkled on the food. Chicory wort *(Cichorium intybus, L.)*, taken in the form of tea, two cups daily for three or four days, one before breakfast, the other at night, will be found very effective.

Kneipp Cure. STOMACH, INDURATION OF THE. A cloth dipped in water and vinegar should be fastened over the abdomen daily for the first week; a warm foot-bath, with ashes and salt, should be taken daily, and the back should be washed with cold water morning and night. In the second week, two short wraps, a Spanish cloak pack once, and a warm foot-bath, with ashes and salt, every other day. Finally, in the third and fourth weeks, three upper and thigh affusions, and two partial baths each week. Tea of pewter grass, sage, and oak-bark should be taken, a small cupful morning and evening.

Kneipp Cure. STOMACH, PAIN IN THE, AND FLATULENCE. A short wrap every day for from an hour and a half to two hours, and,

within two days, to drink the following tea: five to ten grains of powdered aloe, boiled with a teaspoonful of honey and mixed with elder flowers, fennel and fenugreek, a teaspoonful of each.

Kneipp Cure. STOMACH, TUMOR OF THE. Firstly: Three warm, short hayseed wraps, three full lavations, two back and two thigh affusions a week. This treatment to be continued for four weeks.

Secondly: A daily lavation of the upper portion of the body, twice a week; two partial baths during the week and two compresses, consisting of a cloth folded in four, immersed in two-thirds water and one-third vinegar, kept on the abdomen for an hour and a half. A cup of pewter-grass tea with about eight or ten ripe juniper berries, bruised, and a little wormwood, divided into three portions, for morning, noon and night.

Thirdly: During the next four weeks, every week four upper lavations, half water, half vinegar; two partial baths, two compresses on the abdomen, as before, and two warm hayseed shirts as during the first weeks; each to be worn for forty-five minutes, then again wetted with the warm infusion and laid on the abdomen for another forty-five minutes. Take the juniper-berry cure. (See *ibid.*)

Kneipp Cure. ST. VITUS' DANCE. Consists in involuntary twitching of the hands and feet, or of the head. Sometimes the patient cannot keep still even for a few moments.

Treatment.—Go bare-footed all day, in rough weather, in the house; hold the arms in water for three minutes, twice a day; stand, once a day for three minutes, in running water, up to the knees, and take an upper affusion and a half-bath on alternate days. Simple, nourishing food. If the case is that of a child who has previously had measles, scarlatina, or any other eruptive disease, which has not thoroughly broken out, the wet shirt—to be worn from one hour to an hour and a half, or at the most for two hours—must be added to the above treatment.

Kneipp Cure. SYPHILIS. With this so frequently occurring disease many people commit the fault of using steam too much. The cold pack, applied twice a week, suffices in many cases—of course, in combination with three upper thigh affusions, two hip-baths, two partial baths and seven full lavations a week—to evaporate the poisonous matter. A simple diet, strengthening soup for breakfast and supper, strict abstention from alcoholic drinks, and a very regular abstemious mode of life are a *sine qua non.* The cases may be most varied in character, and weak and chilly people must have no cold packs, but warm hayseed shirts every week instead. Of the above-mentioned cold applications, at most

only one should be used daily by such weakly patients. The use of six or eight juniper berries daily is recommended in all cases. A mixed tea of centaury and wormwood, a third part of a cupful morning, noon and evening is also recommended. Tea of angelica root will likewise be of service. The treatment is different when the disease has been suppressed by calomel and iodine, and when the patient has discovered that his condition is now far worse than it was before. This is evidenced by difficult and painful urination, depressed spirits, small ulcers on various parts of the body, swollen tonsils, frequently also excessive salivation, the teeth getting loose and ulcers occurring on the mucous membrane of the tongue and gullet. The scheme of treatment in this case is in general about as follows: Solution and excretion of vitiated matter and the strengthening of the system are the objects which must be kept in view almost daily and pursued with intelligent discrimination. If catarrh of the bladder is connected with the painful urination, as is frequently the case, the treatment must first be directed to that important organ of excretion, the bladder. Warm herbal hip-baths, or, in serious cases, cane-chair steam-baths, followed by the short, cool hip-bath, are applied, with two warm hayseed shirts a week, four upper, four knee, two back affusions and two partial baths. If the patient is otherwise vigorous, full affusions then follow in rotation with the above-mentioned applications. An occasional cold pack, treading water, walking bare-footed, and a juniper cure (which see) are advisable. If the treatment is intelligent and supported by suitable diet and a regular abstemious mode of life, the patient will be rid of the disease in two or three months. Owing to the fact that the cerebral membrane and the skull bones are greatly involved, occasional fits of giddiness and headache may occur for some time afterward, but these will soon disappear if treading water, walking bare-footed, upper and knee affusions, and partial hip-baths are persevered with.

If a patient of this kind is congenitally predisposed to corpulence, other conditions may occur besides, as happened in a certain well-known case. A gentleman had gone through a treatment of poisoning by mercury; he had a very short and big neck, and his head was swollen; he had attacks of vertigo occasionally, was mentally depressed, and had troubles in connection with urination. In an institution a patient of this kind may at once be subjected to the lightning affusion, extending, however, no further than the strong upper part of the body, front and back; the legs, being weak in proportion, receive an ordinary thigh affusion. But a great point is here the head steam-bath, applied twice a week; with cold head affusion afterward. In this case the treatment for the next four weeks would be about as follows: Lightning affusion

on the upper portion of the body, and thigh affusion, both daily; head steam-bath twice a week, and, besides these, three short cold wraps, two hip, two partial baths. After four weeks, half the number of the applications mentioned, with walking bare-footed. On days where the patient is not inclined for any form of cold treatment, he may advantageously have a warm hayseed shirt. Simple nourishing diet for breakfast and supper, best only strengthening soup, a juniper cure, a strict and steady mode of life, are indispensable conditions. If patients are unable to have the water cure applied at once at an hygienic institution in a thorough manner, they should, as a preliminary course, take at home every week the two head steam-baths and the three upper, three thigh, two back affusions, two hip and two partial baths, together with two or three wraps. Lightning affusions require special arrangements and rooms. If spasms or cramps in the abdomen occur, warm hip-baths are the remedy; otherwise the hip and partial baths should always be cold, and last only a few seconds. The destruction wrought by iodine and mercury being often most terrible and resulting sometimes in blindness and mental benightedness, complicated cases must naturally be treated on their own individual merits, and an able natural healer will, in the course of the disease, easily discriminate the right mode from the wrong. A kind of "dry diet" is very serviceable, too, especially at the commencement. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. TAPE-WORM. A quarter of a pound of pumpkin pips, which, after being peeled, are dried, minced with a knife as fine as pearl barley, and mixed with two ounces of clarified sugar. The sufferer from tape-worm, having fasted for ten hours, or eaten nothing during that time, except, perhaps, a red-herring, should begin about seven o'clock in the evening to eat these minced pips leisurely in teaspoonfuls. At first they will taste rather nice, but by degrees will pall upon the palate. Two hours should, therefore, be devoted to their gradual consumption, and good fresh air be breathed in the meantime. If the tape-worm does not come away in the morning, two tablespoonfuls of castor oil should be taken, which will speedily make an end of the complaint.

Kneipp Cure. Thigh Affusion. See Index.

Kneipp Cure. THROAT, AFFECTIONS OF THE. We will first relate a case of severe throat affection with hoarseness, which was treated with brilliant success by the Kneipp cure. An invalid soldier of the war 1870/71 had brought home with him a chronic affection of the

throat. He underwent for years medical treatment (the real quackery), inhaling, cauterizing, and painting with nitrate of silver and iodine. The sufferer, being a teacher, and atrophy of the larynx threatening, he took a place as organist in Leipsic, where he, for a long time, visited the professors of that city. They diagnosed paralysis of the vocal chords, and applied electricity, besides keeping up the cauterizing and painting of his throat. After seven months, seeing no improvement whatever, he tried homeopathy, and, as that too failed to give him relief, at last took refuge in the natural method of healing. He very soon perceived that the short, cold baths and washings did him good, and he also took back affusions and other applications with advantage. His hoarse voice improved from week to week, and after a length of time the hoarseness and paralysis of the vocal chords disappeared entirely. He fills to-day his former post as teacher, and performs his duties with a clear and sonorous voice, without having ever again suffered from hoarseness or in his throat. Water thus cures diseases without medicine, if only it be combined with a regular regimen. The following course of treatment is recommended to any one similarly afflicted: Daily, full washing, and three upper and thigh affusions weekly. After a fortnight, two upper and two thigh and one back affusion. In the case of heat in the throat and larynx, a throat and chest wraps every evening. The water treatment in the above instance also radically cured the foundation of the voice, to wit, the lungs; for when the man, after recovering his health, wished to insure his life, the doctor stated that his lungs were strong and healthy and his voice sonorous, with a metallic ring in it, and that there was no obstacle to his getting his policy. What do the medical gentlemen say to such facts as these? When the good Emperor *Frederick* was on his sickbed, we saw what the medical magnates are capable of. Cutting, cauterizing, and other famous surgical performances were tried on the poor sufferer, and local treatment—medical science knows of no other—was to remove a disease in which the whole system was involved. If no medical man, whether German or English, had crossed his threshold, a simple water cure, applied to the whole body at the right time and by a competent man, would have saved the Emperor and restored him to health to the joy of the German Fatherland, for he had inherited from his forefathers a good and strong constitution. Of that not merely empirics, but hundreds of medical men, who have since been converted, are convinced at this day.

For Inflammation of the Throat a gargle with cool tea of sage, mallow flowers, or fenugreek is greatly recommended. While it lasts, a cold throat wrap (every fifteen or twenty minutes, according to the degree

of heat) and one upper affusion should be employed daily. In all cases of throat affection, or hoarseness, the half-bath and the immersion of the arms in cold water, are most efficacious as derivatives.

For Hoarseness with Catarrh the first thing is a half-bath. A thousand remedies are recommended, but the most effective and the cheapest is unknown. What would not operatic singers give, if somebody could remove their hoarseness within forty-eight hours by a couple of half-baths and two arm-baths between whiles, with perhaps a neck and a shoulder wrap. One must himself have proved the efficacy of such treatment in order to vouch for it. Such a result is foreign to medical science, for there is no smack of learning in it; what is simple and natural is ignored. A cold hip-bath is also recommended in many cases. Tea of mallow blossoms, or fenugreek, taken in the morning and evening with honey, assists the treatment. If in all cases of catarrh of this kind a cold full washing is taken, it will prove itself, after the lapse of ten minutes, to be a reliable remedy. If under such circumstances the patient allows a doctor to look down his throat, he commits a folly, for these gentlemen frequently catch a wretched cold themselves, and cannot get rid of it for weeks, as everybody knows. All whose organs of speech and respiration are often over-exerted—like preachers and schoolmasters—should take frequently an upper affusion. Nothing strengthens lungs and larynx so much as a vigorous upper affusion. It is the best protection against inflammation in throat and thorax; and whoever has tried it in days of health will certainly have recourse to it at once when he feels those parts relaxed and fatigued after great exertion. It is not difficult to see that all means of hardening the body—particularly walking bare-footed—are beneficial to the vocal organs, since many an affection of the throat originates with a chill in the feet.

If the **tonsils** are swollen, the use, twice a week, of the hayseed shirt together with the other modes of cold water treatment, prescribed for inflammation of the throat, will be the proper remedy. See "GLANDS, AFFECTIONS OF THE" in Index.

When there is **great heat in the throat,** the infusion of fenugreek *(Foenum Graecum),* or the seeds of salsify root is used as a gargle *(Trigonella Foenum Graecum).* A teaspoonful of the powder is sufficient for a cup of moderate size. The tea may likewise be swallowed, a large spoonful every hour. For swollen throat a gargle should be used of fresh or dry violet leaves (a handful boiled in half a pint of water), and a throat wrap applied, steeped in the same decoction. A gargle, or tea, of mullein *(Verbascum Schraderis Meyer)* acts vigorously as a solvent of phlegm, and still more potently with the addition of as much black

mallow. See also "GARGLE," p. 669, and further, pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. Throat Pack. See Index.

Kneipp Cure. TOOTHACHE, originating in rheumatism due to taking cold, is relieved most speedily by the head steam-bath, followed for several days by full lavations, to take which the patient must get out of bed, returning to it after the washing. If the toothache is due to decay in a tooth and formation of a fistula, the head should be made hardy by head affusions, full lavations, and the mouth should be rinsed with an infusion of fenugreek and nettle, mixed. If, on the other hand, determination of blood to the head—often accompanied by a swelled face—is the cause of the toothache, the pain will be most surely relieved by a daily cold short wrap, lasting an hour and a half, and by taking a full lavation during the night (the patient getting out of bed for the purpose, and returning to it). These applications are continued for several days. Toothache, which often comes on suddenly, without any of the above mentioned causes, is cured in the following manner: By walking twice daily for three minutes in cold water above the calves, and taking an upper affusion. This is continued for some days, and then, in order to make the body hardy, the walking in water should go on for several weeks longer. Walking bare-foot on cold, wet ground, or in cold rainy weather, is an approved remedy for violent toothache. For this affection the excretory oil is also used. The part behind the ears, and the back of the head being first rubbed till both are very warm; three or four drops are then dabbed on the part so warmed. If no result ensues within a day, the operation must be repeated. Teeth with unsound gums, which are suffused with congealed blood, are cleaned with diluted alum-water.

Kneipp Cure. TREMBLING CRAMP. Most frequently trembling cramp attacks the hands, less frequently the legs, and sometimes the head. The cause of such attacks is to be sought for in some constitutional disorder, such as gout, a full habit, weakness, alcoholism, or poisoning from drugs, and the treatment should be directed to the cure of that disorder. In every case, however, the nervous system will have to be strengthened, and, if the general condition of the patient is low, a beginning should be made with partial washings; at first of the upper, and then of the lower part of the body, on different days. The arms and legs, however, may be douched from the commencement. If the patient is of a full habit, affusions should mark the opening stage of the cure, in the order: thigh, chest, back and arms; but a suffering

limb, be it arm or leg, may be well douched whenever an attack of pain comes on. The Spanish cloak should also be employed once or twice a week.

If the cause of the illness is drunkenness, or drug-poisoning, the treatment in the former case must be in accordance with the directions given under that head. In the latter case, if the patient is not strong naturally, partial washings must be resorted to, with two short packs a week, and daily arm and leg affusions. It frequently happens that women of a gouty habit are attacked with this fearful malady during the change of life, and generally, under such circumstances, the monthly period has long previously ceased. In addition to the daily arm and leg affusions, further water treatment will then be called for in the form of an upper body washing every day, with two hip-baths and one half-bath during the week. At night, abdominal compresses should be applied —warm or cold, as best suits the patient—for alternative purposes If the natural warmth is deficient, the warm hayseed shirt, three times a week, is very strongly recommended. As the digestion is, in all these cases, more or less enfeebled, the bowels sluggish, and the stomach unequal to its functions, the juniper berry cure, in the first place, and then a mixed tea of wormwood, pewter grass and sage—one-third of a cupful morning, noon and evening—will be advisable, and a tablespoonful of cold water every hour.

In the morning strengthening soup or malt coffee, at midday a pigeon or chicken,—easily digestible animal food of that kind, with plenty of vegetables or fruit, a tablespoonful of milk frequently, good black bread, or stale white bread, dipped in sugar water. Exercise in the house or room; as much sunshine, light and good air as possible, and, as soon as the strength allows, out of doors; at first in the midday hours, afterward several times a day. Great perseverance is needed in these cases to accomplish the wished-for cure.

Kneipp Cure. TUMOR is always a rallying point of impure humors in the body, and it is the whole body, therefore, that should be acted upon. If the swelling is hard, warm fenugreek compresses are applied. These will help either to disperse the matter, or to bring the tumor to a head. The whole system will be benefitted by two full washings and one short wrap daily. By this means the morbid matter will be drawn out and the tumor removed. If the latter happens to be at the knee, a short, cold wrap, and if at the ankle, a foot wrap of the same description, should be applied as an additional means of carrying off the matter. If the throat is swollen, a tea of fresh or dried violet leaves, or made from the powdered root, will prove an excellent gargle. At the same time,

the neck wrap, which should be applied, is wetted with an infusion of violet leaves instead of ordinary water. If there is much heat in a tumor, violet leaves, bruised and laid over it, will have a cooling effect. See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. TUMORS, HARD, without inflammation, yield to a decoction of young oak-bark, applied in the form of hip baths. (See "DECOCTION OF OAK-BARK.") If there is great heat in the swellings, they should be gently rubbed with oil of almonds, which will sooth the pricking pain and reduce the heat. Bruised violet leaves, laid on the tumor, have a similar effect.

Kneipp Cure. TYPHOID FEVER. Popular phraseology distinguishes various forms of this disease, such as abdominal or intestinal typhus, spotted fever, cerebral or pulmonary typhus. As the causes and symptoms of all are mostly the same, there is also but little variation in the treatment.

In **abdominal typhoid fever,** full lavations, in turn with full packs or Spanish cloak, play the leading part. But besides these two forms, there may be applied every four hours for half a minute a cold partial bath, but so that the Spanish cloak comes an hour and a half after the full lavation, and the partial bath an hour and a half after the Spanish cloak These three applications carry off all morbid matter, and recovery then proceeds rapidly. As beverage, the patient should have at short intervals one or two spoonfuls of a decoction of fenugreek, and a few days later, a spoonful of good olive oil, daily, morning and afternoon. Mucilaginous soups must be the only soups at the commencement, and for a beverage, water with raspberry juice is recommended.

Cerebral Typhoid Fever requires the same treatment as the last, except that cold head compresses should be applied repeatedly, in addition to the full lavations.

Sequelæ of Typhoid Fever. If some morbid matter remains in the system, inflammation and ulcers in the abdomen, with much discharge of matter, will frequently supervene. In such a case the warm hayseed shirt, three times a week, for an hour and a half at a time, combined with full lavation, must be resorted to. After about a fortnight, the ulcers will have disappeared, and a radical cure will speedily follow. In order to strengthen the system, two or three short, cold partial baths should now be taken weekly. Sound sleep and good appetite will do the rest in restoring to former health. The cure may be helped forward by taking every day a cup of wormwood, centaury, and pewter-grass tea. (See also pp. 734, 735. For Modes of Application, see Index.)

Kneipp Cure. ULCERS AND ABSCESSES. These may make their appearance on various parts of the body; and the special treatment has, in the main, to be adapted to the circumstances.

Where the constitution is not strong, and especially with delicate children, the wet, warm shirt is, as a rule, the first remedy—to be followed immediately by cold washing, which may often be given with advantage twice a day. By these ulcers nature indicates her desire to excrete impure matter, and she only requires a little help. For vigorous constitutions the shirt, wrung out in cold saltwater, and applied three times a week, should be adapted rather than the warm one; and powdered limewood charcoal or a little aloe-powder should be sprinkled daily on the affected parts, which are then bandaged dry. For all ulcers, even of a cancerous nature, one may resort to infusion of pewter grass, in combination with washings, compresses, and packs. A cupful now and then of the same infusion is recommended as a drink for adults, as it cleanses the stomach, and relieves the kidneys and bladder. Of course, the above injunctions have reference only to external ulcers. If left to nature alone, ulcers will frequently take a long time to heal; and, after having healed, will appear again, because nature was not encouraged to secrete vigorously enough; they will also often spread, and, if situated on the head, may induce blindness, or become cancerous. For abscesses of the bones, hayseed or fenugreek compresses, or curd plasters, should be applied. Father Kneipp, and a great many Kneipp leaders who follow in his footsteps, declare that—in many cases in which the mouth, nose, and eyes of children were ulcerated, and the sufferers reduced very nearly to blindness, by unsuccessful medical treatment—they, in a comparatively short time, not only saved the children's eyesight, but completely restored them to health, by the employment of the above remedies. In such cases three head affusions weekly will be necessary, to strengthen the head, while the eyes are meanwhile daily washed with fennel water. Adults, especially those blessed with a strong constitution, need only occasionally apply a so-called three-quarter pack or Kneipp's cold wrap, in order to escape trouble from ulcers of any kind. It need hardly be said that in this case also half baths, twice a week, and as many upper and thigh jet baths may conclude the treatment. It is entirely wrong and reprehensible, in such cases, to have recourse to the use of carbolic acid by the gallon. Dr. *Walser*, a well-known natural healer, relates a case of an ulcer on the leg eleven inches long and as many wide, and which had penetrated to the bone. The most famous medical men had tried their skill in vain on the sufferer (who was a brother of an order of monks) for sixteen years, and has used more than a barrel of carbolic acid, and not only without success, but with the unfavorable result that the

ulcer spread more and more. Dr. *Walser* himself was doubtful, whether, with the disease in such an advanced state, the natural method would be of any avail, and whether amputation was not the best remedy. The monk was a fleshy man, and that gave the doctor the cue for his treatment. The partial, imperfect patching-up of the ulcer, hitherto pursued, had done no good whatever. The vital force, the most important healing father, must first be revived by a general strengthening treatment, and it will then turn, as Kneipp says in telling language, all the morbid matter in the system, like so many dirty rags, out of the house. Dr. *Walser* had a long and broad compress of thin linen, in four layers, immersed in water of 81°, put on the ulcer; over that a second compress of course linen, eight thicknesses, and dipped in water of 67°. The first, lying immediately on the ulcer, served as a permanent compress, and was not removed; while the second thick one was renewed, as the under one became dry. This arrangement formed a continuous bandage which acted like a mild blister in stimulating the healing effects of nature. At the same time, washings; upper and lower, as well as back and full affusions, were brought into action, and after two months' treatment, the terrible ulcer was healed, and a new epidermis had formed. The affected leg had assumed exactly the same shape as the sound one, and there was nowhere any scar to be seen on the skin. Who was it that performed that wonderful cure? "Not I," exclaims Dr. *Walser*, "but nature—assisted and incited by my prescriptions." See also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. ULCEROUS SORES are healed by colt's-foot leaves *(Tussilago Farfara, L.)* laid on the wounds. The leaves absorb the heat, and draw out the vicious matter. Charcoal dust—that made of limewood is the best—powdered on the wounds once or twice a day, acts as an absorbent, and promotes the formation of fresh skin. An American aloe leaf, boiled in a pint of water with a teaspoonful of honey, is recommended as a lotion. A simple, efficacious, and harmless remedy is honey, used as an ointment; half honey, half flour, well mixed with a little water till a fairly firm salve is obtained. In addition, of course, washings, various affusions, and half baths.

Kneipp Cure. Upper Packs. See Index.

Kneipp Cure. Upper Affusion. See Index.

Kneipp Cure. Urination, Painful. See "Bladder and Kidneys, Diseases of the."

Kneipp Cure. VARICOSE VEINS. A cure can only be effected by general treatment of the whole body. The best remedy will be sev-

eral back and thigh affusions weekly, in alternation with whole washings. A special method of local treatment is as follows: A small piece of linen or lint is dipped in vinegar and water, laid on the vein, and bound on as tightly as possible. A decoction of oak bark is then made, with which the piece of linen is wetted, the decoction being used warm, and the linen bound on tightly. Internally a tea should be taken twice a day of common horse-tail, in turn with that made from blood-wort *(Rumex sanguineus)*. If a vein has burst, the above treatment must be repeated; the loss of blood will, of course produce weakness. Sufferers from varicose veins, when making use of foot baths, should be careful that the water does not reach above the calves of the legs, nor exceed 88° in temperature. (See also pp. 734, 735.)

Kneipp Cure. VERTIGO. Partial lavations and treading water are beneficial in this malady. Internally, oil of lavender, five drops taken on sugar, twice daily. Rue *(Ruta graveolens, L.)*, in the form of tea, or soaked in brandy, ten or twelve drops, twice a day, or taken with olive oil. The latter, together with the rue, must have stood in a warm place for some time. With these infusions or tinctures must be combined knee affusions or treading water; above all, plenty of fresh air, and rest corresponding with the patient's condition.

Kneipp Cure. VOCAL CHORDS, PARALYSIS OF THE. At first, washing of the upper part of the body only, in combination with knee and thigh affusions; then two half baths a week, and either a shawl or short pack every morning, or every other evening. Next, the upper affusions, and the thigh affusion, in rotation with the back affusion. It depends on the individual case. If the patient is corpulent, full, back, upper, and thigh affusions may begin the treatment; with the Spanish cloak once or twice, and a half bath once in the week. In a few weeks' time an eruption will, in most cases, appear; and this is a sign of the throwing off of morbid matter engendered by internal inflammation. The baths, affusions and packs must be continued. With weakly patients, the beginning of the treatment should consist of partial washings of the upper and lower parts of the body separately; then, by degrees, may follow upper and thigh affusions, in rotation with the half bath. The inflammation, however, will not yield, unless throat and chest compresses and short wraps are given in the evening; a conclusion which should be noted as applying to all other complaints. So long as pain, due to inflammation, is present, compresses and wraps must be employed to resolve the cause of the inflammation; then, and only then, the various affusions will be of service.

Kneipp Cure. VOMITING. Those who are troubled with a frequent disposition to vomit should take about a saltspoonful of powdered mint daily, and drink mint tea frequently. A decoction of mint, prepared with vinegar, and taken occasionally, one or two teaspoonfuls at a time, stops the vomiting of blood. In the case of children, who are suffering from diarrhœa and vomiting at the same time, barley or oatmeal gruel should take the place of milk.

Kneipp Cure. Warm and Cold Baths Alternate. See Index.

Kneipp Cure. Warm and Cold Hip Baths Alternate. See Index.

Kneipp Cure. Wet Shirt. See Index.

Kneipp Cure. WETTING THE BED. This habit is usually only the consequence of bodily weakness, and it is wrong to punish children for it. Children of from two to six years of age should have a cold half bath daily (duration, three seconds), with generous diet. Those from fourteen to sixteen years old should at first be made to walk or tread in water; afterward they should have daily an upper affusion or half bath, cold and short of duration, in addition to treading in water. Adults may walk or tread daily for from two to ten minutes up to or over their knees in cold water, and should take every week three cold half baths, each lasting six seconds, living the while on good, homely fare without beer. To promote digestion they should eat daily ten juniper berries. After a few weeks the unpleasant habit will have ceased, but the patient must continue to take from one to three half baths a week for some length of time. An infusion of St. John's wort *(Hypericum perforatum, L.)* or of yarrow will help to remove the evil by acting as tonics.

Kneipp Cure. Whole Affusion. See Index.

Kneipp Cure. Whole Bath, Cold. See Index.

Kneipp Cure. Whole Bath, Warm. See Index.

Kneipp Cure. WHOOPING COUGH. Particular care must here be taken not to excite the cough. The applications have to be, therefore, mild and cautious. A strong child may have an alternate bath twice daily; *i. e.*, first a warm bath of five minutes' duration, and immediately after one of 67° for one second only. Weakly children should only have such a bath once a day. Internally are given daily from twelve to eighteen drops of fennel oil on sugar. Also tea of violet leaves is good in this case. Kneipp applies also another treatment: The child, with its shirt on, is immersed in a warm infusion of hayseed, and, after that, wrapped in a blanket for two hours; and this may be done at first twice a day, later only

once, and at last only twice a week. In every case, dust must be avoided as much as possible, and the room should therefore be cleaned and aired well. See "COUGH," also pp. 734, 735. For Modes of Application, see Index.

Kneipp Cure. WIND. A full enema, of 81° temperature, should be dried. From four to seven drops of oil of aniseed or fennel on sugar, once or twice a day, may be taken. Tea of these seeds may be substituted for their oil; aniseed is far superior to fennel, and both teas are often mixed together.

Kneipp Cure. WORMS. Make an infusion of wormwood, mixed with twenty-five pumpkin seeds, and continue to take this for several weeks. The worms, which cannot endure the bitterness, will soon disappear.

Kneipp Cure. WOUND CRAMP. Occurs often to sufferers from wounds, and is terribly painful. Hot hayseed compresses are the best remedy in such cases, laid, in the first place, over the wound, and then over every part of the body to which the cramp extends. The object is perspiration, and this may be produced by hot bottles also, or by short partial steamings. A tea of lime blossoms and elder, which is sudorific, may be administered as a drink.

Kneipp Cure. WOUNDS, FRESH. Lavations and compresses, with two parts water and one part tincture of arnica, are highly recommended. The blossoms are gathered in June or July, and soaked in brandy or spirit; they will be ready for use in three days. Sauerkraut, taken fresh from the tub, renders excellent service. A few drops of the juice of ribwort leaves, applied direct to the wound, or on a piece of lint or rag, heals it quickly, and prevents proud flesh. See also "ULCERS."

Kneipp Cure. WOUNDS, PUTREFYING. Pewter grass, applied externally in various forms; partly as a decoction for lavations, packs, compresses, and partly in the steam-bath, or the herb itself wrapped in a wet cloth and put on the wound. Powdered alumn is sprinkled on the wound, or a solution of it in water used for lavations or to wet small linen compresses, is also very serviceable. Alum, after properly cleansing the wound, dries it up by its astringent properties. Compresses wetted with aloe water purify and heal wounds of this description. Sprinkling aloe powder thickly on the wound every day, and then covering it with a dry bandage, promotes the new formation of skin. Decoction of sage *(Salvia off., L.)*, used for rinsing the wound or in bandaging it, heals safely and quickly. Sauerkraut, taken fresh from the tub, and laid on the wound, serves to dissolve and eliminate bad matter.

Kneipp Cure. WRITER'S CRAMP. One cause of this complaint is that the pen is wrongly held and used. The man who, with bent-up fingers, holds his pen tightly, and writes laboriously with the whole arm, must expect to find himself overtaken by nervousness and writer's cramp, since the cramped position of the hand, in holding and using the pen, brings too great a strain on the motor muscles and nerves, thereby producing irritation and weakness. The pen should be held with outstretched fingers and with the thumb only slightly bent, and should then be lightly worked by the fingers, not by the whole hand, still less by the arm. The elbow should remain still. Writer's cramp may, however, occur in consequence of an excessive amount of writing. The whole nervous system must be operated upon by a course of Kneipp baths and affusions, including plunging the right hand and arm, three times a day, in cold water, for two or three minutes at a time, which latter practice is most strongly urged. Tobacco, spirits, coffee, and all nerve-exciting foods and habits must be eschewed; simple diet, open-air exercise, diligent perseverance in walking bare-footed should, on the other hand, be the rule. Rest for the right hand is indispensable. He who *must* write should learn to do so with the left hand.

Muscle exercises, particularly of the arms and fingers, should be practised morning, noon, and evening, of a kind which will include the thrusting-out of the arm with the hands clenched, that is to say, with both hands doubled and opened alternately, the arm movement being made to the side, as well as to the front, twenty or thirty times. In this manner the muscles will, after a considerable lapse of time, be strengthened; the fingers will become capable of easy movement; and, at the conclusion of the treatment, the right hand will be able to use the pen with its former skill and freedom, and the writer will be assured against any future attack of writer's cramp.

Knock-Kneed, see "KNEE-JOINT, DISEASES OF."

KUHNE CURE, or *Kuhne's* treatment of diseases, so called from its discoverer, *Louis Kuhne* of Leipsic, who puts forward the doctrine of the identity of all diseases, and has for its purpose the uniform treatment. *Kuhne's* theory teaches that there exists but one single disease, expressed in the most various forms. The peculiar characteristic of this one disease is the collection of foreign substances or morbid matter in the body, which they are unfit to build up and preserve. When the elimination of these foreign substances by the excretory organs—the intestines, kidneys, skin, and lungs—does not take place at the proper time, and their removal from the body can no longer be effected without an effort, then "disease" ensues. These foreign substances, as *Kuhne*

prefers to call them, are due partly to the consumption of a greater quantity of food than man requires to build up the wasted and used-up tissues of his body, and partly to the reception into the body of unsuitable nourishment which does not answer to the physiological requirements of man, such as meat, spice, alcoholic or narcotic beverages (as, wine, beer, brandy, coffee, tea, etc.), which, on the one hand, possess hardly any nutritive value, and, on the other, cause a condition of irritation in the body, which is necessarily followed by relaxation. The natural consequence of this is that the organs become prematurely weak and enfeebled, and incapable of performing their appointed task.

Moreover, medical poisons used as remedies; tobacco, either in the form of snuff, or for chewing and smoking; as well as vaccine poison (calf lymph), which, being incorporated in the system, are either not excreted at all, or only in a small measure, and thus remain in the body as morbid matter. Other substances, too, enter the system; such as impure, vitiated air; exhalations from sewers and stables; so-called disinfectants; other people's exhalations; dust, etc., likewise accumulating there as foreign substances. Finally the dross of the human mechanism—to make use of a metaphor, the used-up, worn-out parts of organs—remains behind in the body in consequence of a faulty mode of life, instead of being conducted into the veins to be carried by them into the excretory organs, and removed altogether.

The system, obeying nature's laws which govern life in all its relations, endeavors to get rid of these useless, injurious, clogging foreign substances, morbid matter, producers of disease, or remnants of matter. As a consequence, the foreign substances crowd toward the natural means of exit, and are chiefly deposited in the abdomen owing to their inability, by reason of their quantity, to pass all simultaneously. From this point (the abdomen) they gradually advance to the extremities, or are deposited, in obedience to the physical law of gravity, on the right or left side of the body, or front or in the back, according to the position most usually assumed or indulged in by the individual.

This depositing process, going on in the system, is noticed little if at all, or it causes shivering twinges in the limbs, an inexpressible restlessness, general indisposition,—characteristics which are apt to precede inflammatory or febrile diseases. The febrile matters which have been deposited are putrefying or fermenting substances. There is no doubt that fermentation is a kind of putrefaction, consequent on the disintegration and corruption of some organic substance. If now some powerful material influence—whether external or internal—arises (*e. g.*, chill, overheating, emotion, and so on), the deposited morbid matter becomes active and ferments, and, like all products of fermentation, seeks

an exit from the space to which it is confined, and moves upward and in the direction of the outer skin, according to its position, and following the lymph passages of the body. If now they meet with resistance or with an obstacle on their way, they either distend the space, within which they have become active, by causing an external (swelling, goitre, etc.) or internal (polyp, emphysema, induration, etc.) new growth, or else the producers of diseases sink into the lower extremities, that is, into the legs and feet. They have, however, a constant tendency to get away as far as possible from the place where they were first deposited, and to penetrate into the most distant parts,—into the head, neck, hands, feet, fingers, and toes. Here they go no farther. The exit through the skin is mostly closed to them, since want of attention to its action, or a perverse mode of life has made it entirely inactive and weak; or, if there is any normal function left in it, it cannot respond to the sudden and excessive pressure of the foreign substances, and expel them at once and in a satisfactory manner.

The secretory function of the skin being lessened or entirely suppressed: intestines, kidneys, and lungs no longer acting properly; the morbid matter, arrested in its progress, now causes pathological changes in the tissues of the system to take place, which entirely alter by degrees the normal shape of the body. The tissues grow harder; muscles, which before were soft to the touch, acquire tension, which becomes very evident, particularly in movements of the body, both to the sight and touch. In other cases, again, the presence of morbid matter produces expansion, and consequently increase in size. Any one can easily and daily convince himself of the accuracy of this fact, by looking at corpulent people whose body is distended by foreign substances, or by examining lean people, who display a greater or less tension of the tissues.

Since the foreign substances, as stated above, have a tendency to find their way to the extremities, the neck forms a narrow pass, as it were, between head and body, and it is particularly at this place, that the deposited morbid matter is most palpable and perceptible.

In this place as well as on the head, says *Kuhne*, the changes which have taken place (*e. g.*, knots, tension) will always point with absolute certainty to an accompanying effect in the body. That is to say, the course of past and future morbid matters during their passage in the system can be distinctly traced. This fact is said to be attested by thousands of experiments and based upon what *Kuhne* calls the infallible method of diagnosing which admits of no possibility of deception or stimulation, and enables the physician to determine, not only previous disturbances in the system, but—*mirabile dictu*—to perceive even the

predisposition to future diseases. He calls this: "The science of facial expression."

At the neck and the head can be distinctly seen what are the different degrees of taint in different persons, and whether the morbid matter has taken its upward course in front or behind, on the left or on the right side. Moreover, the complexion, the condition of the skin (whether it is hot or cold, moist or dry), the lustre of the eye, the appearance of the hair, and various other signs come under observation.

Also the figure and the build of the parents, together with their taint, is transmitted to the children. Therefore, says *Kuhne*, long before a person himself becomes aware of its presence, an outbreak of any disease in this or that organ at some future time can be predicted with certainty.

The treatment consists of trunk baths, hip baths with rubbing, or board bath, as well as a certain kind of vapor bath. The hip baths with rubbing, as well as the inventor *Louis Kuhne*, have, however, of late been the subject of attack, and these hip baths are now applied only in isolated cases.

The diet prescribed in connection with *Kuhne's* treatment is strictly vegetarian.

The adherents of *Kuhne* apply his treatment in all cases of illness.

L.

Labium Leporinum, see "HARELIP."

Labor, see "WOMEN, DISEASES OF."

Labor Pains, see "WOMEN, DISEASES OF."

LARYNGEAL PHTHISIS. As a rule, this accompanies consumption of the lungs, and seldom appears alone. In this disease ulcers form on the mucous membranes of the larynx and on the vocal chords.

SYMPTOMS.—Very pronounced difficulty in swallowing, expectoration of greenish yellow phlegm mixed at times with blood, and in other respects almost all the symptoms of chronic laryngitis and particularly more or less hoarseness.

TREATMENT.—This is the same as for consumption of the lungs (phthisis), and in connection with this treatment stimulating or soothing throat packs, according to the patient's condition, and derivative treatment, such as stimulating abdominal and calf packs. Gargle daily with water of from 77° to 82°.

LARYNGEAL ULCER of syphilitic or tuberculous origin.

TREATMENT.—In the first place apply the proper treatment for the primary disease. Breathe mild, pure air; sleep with the window open, and live on a strictly non-stimulating diet. Above all things, apply a strengthening treatment, or, if adapted to the case or to the patient's strength, a regenerative or preliminary treatment, and gentle vibration of the larynx; massage of the neck and back, but performed by an expert, and, even then, only most cautiously. Also steam-bath, followed by full pack and bath; massage of the whole body; frequent throat compresses, to be changed as required, and a derivative treatment. For Modes of Application, see Index.

LARYNGITIS, ACUTE, is usually caused by colds, and either attacks the larynx direct, or first the pituitary and pharyngeal, and then the laryngeal mucous membrane.

This catarrh also occurs in combination with that of the mucous membrane of the trachea.

SYMPTOMS.—The catarrh chiefly attacks the vocal chords, producing roughness, hoarseness, and even loss of the voice. But if it establishes itself more in the interior of the larynx, considerable swelling, allied with violent inflammation, may take place; the opening of the larynx may become so contracted as to produce difficulty of breathing, and to threaten danger from suffocation. There is always more or less fever with the catarrh. Accompanying symptoms are, tickling, burning sensation, and provocation to cough in the larynx, and abundant discharge of mucus.

This affliction also suddenly attacks young children at night, who may have been playing merrily during the day, and on going to bed were apparently in good health, with the distressing symptoms of great difficulty of breathing, a rough barking cough, quite similar, therefore, to those occurring in quinsy.

TREATMENT.—Stimulating three-quarter or full pack daily, or steam-bath in bed (No. 1), followed by lukewarm (88°) bath, and accompanied by cold affusions, especially of the throat, neck and back (the last to be gently slapped with the flat hand); then the patient should return to bed to get thoroughly warm again.

Stimulating throat compresses, changed every one or two hours, together with stimulating leg packs; non-stimulating, cool diet; pure, mild air in and out of doors, and regular bowels, enforced by enemata. Also lukewarm (81° to 86°) garglings daily, according to requirement.

A second treatment applied in acute and chronic cases alike: Tepid throat compresses (75°) to be kept on for from one to two hours, and fol-

lowed by wet rubbing of the throat or of the whole body, also stimulating (68°) foot packs of from two to three hours' duration or longer, according to the patient's condition, wet rubbing (73°) of the whole body morning and night, besides gargling the throat with lukewarm (82°) water daily, as required. See also "CATARRH" in Kneipp cure.

DIET.—Semi-liquid food and non-stimulating diet, open bowels by means of enemata if necessary. Massage of the neck is recommended both in acute and chronic cases. Breathing exercises, too, are useful. For Modes of Application, see Index.

LARYNGITIS, CHRONIC, is most frequently met with in persons who, by their vocation, are obliged to inhale bad air and dust, or irritating gases, such as stokers, etc. This ailment is also common among people who, by reason of their profession, are compelled to sing or speak loudly; *e. g.*, teachers, clergymen, singers, etc. All such people should take very seriously any acute attack of bronchitis or laryngitis, and do all to prevent the disease from assuming a chronic character.

SYMPTOMS.—Roughness, dryness, and a tickling in the larynx. The patients are compelled to clear their throat frequently, and when coughing they expectorate small, gray, roundish masses of phlegm, which are coughed up with difficulty. Moreover, persistent hoarseness and a rough voice; the larynx is dark-red, sometimes affected with ulcers.

TREATMENT.—Avoid smoky, dust-laden air, hot food, and drink. Apply tepid (73°) throat and leg packs at night, followed in the morning by a (73°) wet rubbing of the whole body.

When the feet are cold, a foot steam-bath of twenty minutes' duration, and after that a wet rubbing (68° to 73°) of the feet to be given in the evening. Strengthening treatment besides. In this disease, spices, tobacco, salts, and spirituous liquors must be scrupulously avoided, or indulged in only very sparingly indeed. Cool, non-stimulating diet to be observed, and pure, mild air breathed. A few stimulating three-quarter or full packs, or steam-baths in bed, followed by wet rubbing of the whole body, or bath instead, may be taken weekly. In all laryngeal affections, trunk and shoulder packs, combined with a detergent treatment, are always effective.

The mouth must always be kept closed, and breath taken through the nose. For "TREATMENT WITH MASSAGE," "BREATHING EXERCISES," see Index. See also "CATARRH" in Kneipp cure.

For particulars of Massage, Kneipp cure, and Modes of Application, see Index.

LARYNGITIS CURED.

By Edmund Schneckenberg.

A schoolteacher, twenty-nine years of age, had suffered for three years from laryngitis. Various kinds of treatment which he tried had cost him a good deal of money, it is true, but had procured him no relief. As his complaint got worse instead of better, he began to fear, as most people affected with laryngitis often do, that he was consumptive.

Fortunately for him he heard of the Natural Method of Healing, and a course of treatment lasting nine weeks in a sanatorium conducted on the principles of this method resulted in a complete cure. Absolutely pure air is the first and principal requisite in the cure of laryngitis, as the chief cause of this form of catarrh is impure or vitiated air. The patient in question breathed pure air day and night, and every kind of nourishment likely to produce irritation was carefully avoided. As his strength had kept up fairly well, an excretory and derivative treatment could be vigorously applied (shallow baths, packs, wraps, steam-baths, sun and air baths, walking bare-foot and mouth baths). To stimulate the action of the heart, systematic hill-climbing was prescribed. And what was the result? Whereas he could only speak with great exertion when he began the treatment, he now performs his duties at school without feeling any fatigue. (From *Weickert's* book "Nature Heals.")

Laryngitis Crouposa, see "Croup."

LARYNGOSCOPE. This instrument is inserted far into the cavity of the mouth. Rays of light are thrown on the mirror from the outside, and these are then reflected on the larynx. By this means the interior (Fig. 223) edge of the larynx can be distinctly seen, so that it is possible to recognize inflammation and other affections of the larynx. This instrument was invented in the year 1854 by *Garcia* who was not a medical man.

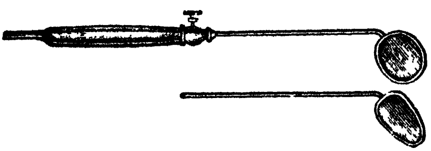


Fig. 223.

LARYNX, CANCER OF THE, arises, as cancer does everywhere else, principally in consequence of the vitiation and degeneration of the humors of the body. Previous affections of the larynx of a syphilitic nature, and immoderate smoking, or constant breathing of dusty air, or of air laden with various kinds of poisonous matter, may favor the development of cancer.

This form of cancer is gradual in growth, spreads very slowly, and eats away the walls of the larynx, and causes the hard substance to fester and decay.

Symptoms.—Feeling of pressure, hoarseness, difficulty in breathing and swallowing. When the disease has made some progress, there is a taste of pus in the mouth, and violent pains are felt, and loss of the voice sets in; swallowing becomes impossible, and breathing exceedingly difficult.

Treatment.—There is little hope of success unless the treatment is applied in the very earliest stages of the disease. A moderate regenerative treatment, in order to purify the blood and humors, is most advisable. Further, frequent gargling with water (from 65° to 73°), to which a little lemon juice is added. Weekly, two or three steam-baths, or steam-baths in bed, with packs, and followed by a bath. An extra compress should be put round the neck when a pack is applied. According to the state of the patient, soothing or stimulating packs should be applied to the throat, and, at the same time, stimulating abdominal and calf packs given. Derivative throat and back massage, and also massage of the whole body. Strictly vegetarian diet. For Modes of Application and further information on Massage, see Index.

LARYNX, ŒDEMA OF THE. (Dropsical Swelling of the Mucous Membrane of the Larynx.) This ailment is generally the result of previous affections of the larynx or of other diseases. Injury to the larynx, malignant irritation of the same, very severe catarrh, etc., may also cause the disease.

Symptoms.—Hard, dry cough; difficulty in breathing and swallowing; a feeling of pressure in the throat; hoarseness, at times complete loss of the voice; also danger of suffocation.

Treatment.—Weekly two or three steam-baths in bed with extra compress round the throat, and bath to follow, during which apply affusion of the region of the larynx and vigorous friction of the arms and legs. Daily soothing or stimulating throat packs, according to the patient's condition; at the same time stimulating abdominal and calf pack. Gentle massage of the larynx and thorough massage of the chest, back and nape of the neck. When danger of suffocation arises, apply continuous steam compresses to throat and chest, combined with vigorous massage of chest, back and neck; also Kneipp upper affusion and alternating knee affusion. For Modes of Application and information on Massage, see Index.

LARYNX, SYPHILITIC AFFECTION OF THE. It very often happens that persons suffering from syphilis are attacked with various

laryngeal troubles. Malignant growths of greenish-white color, and more or less large, make their appearance on the mucous membrane of the larynx and on the vocal chords. Knot-like ulcers may appear, which may in time turn gangrenous and entirely destroy the larynx.

TREATMENT as in syphilis, and, in addition, stimulating or soothing throat compresses, connected with stimulating abdominal and calf packs. Gargle frequently with water (73°), to which a little lemon juice has been added. Vibration of the larynx will sometimes disperse the ulcerous growths. For Modes of Application, see Index.

Lassitude, see "DEPRESSION."

Leaf, Hay, Bran and Meal Baths, see Index.

LEECHES should never be applied, for by withdrawing blood from the body the patient's life is jeopardized, and the prospect of curing the disease greatly diminished.

It is sad to think that leeches are employed by medical men even at the present day.

For further information, see "BLOOD, LETTING OF."

Leg-Bath, see "FOOT-BATH."

Leg, Fractured, see "FRACTURE."

Leg, Gout in the, see "GOUT."

Leg Steam-Bath, see "FOOT STEAM-BATH."

LEMON CURE. Every day witnesses the appearance of some new miraculous remedy for some particular disease, or, it may be, for a number of diseases. The *modus operandi* of these remedies is so skilfully and plausibly explained, and marvelous cures resulting from their use are so persistently advertised, that in time even those inclined to be most sceptical begin to waver in their judgment. When, in addition, the efficacy of the new remedy is attested by a number of testimonials, scepticism gives way to the conviction that "there must be something in it." This has been the case with the popular "lemon cure," vaunted as a panacea for all manner of gouty, rheumatic and other disorders, but which, if resorted to, as it has been, without due and careful deliberation, has been productive of no small amount of harm.

What is the "lemon cure?" According to the numerous pamphlets descriptive of the treatment, the squeezed-out juice of one lemon has to be taken the first day, and after that the number is increased by two every day, till the maximum quantity of twenty-five a day is reached. This number is maintained for a few days and then reduced by two daily till the patient comes back to one a day. Many readers of the above

will feel their mouths water at the idea of twenty-five lemons a day; this quantity is, however, not infrequently exceeded, in accordance with the notion that we cannot have too much of a good thing. A good lemon contains rather more than five per cent. of citric acid. If we reckon the average weight of a lemon as a hundred and twenty grammes, the quantity of pure citric acid consumed in twenty-five lemons reaches the respectable amount of over a hundred and fifty grammes, a dose which, as pharmaceutical investigations have shown, is capable of producing serious disturbances in certain organs. That in spite of the great popularity of the "lemon cure," comparatively few cases of such disturbances have been known to occur, is explained by the fact that those who suffer from them have little interest in mentioning them, or even purposely avoid doing so; the disorders in question are, moreover, liable to escape the attention of people without professional knowledge, or are attributed to other causes. Yet, even in the most enthusiastic accounts of the success of the treatment, we sometimes find it stated that consciousness was partially lost, and that a condition resembling intoxication had set in on the day of the maximum dose, that the required quantity could only be consumed with great effort, etc. The evil effects show themselves in the heart, lungs and alimentary canal. In addition to loss of consciousness, hemorrhage from the lungs and intestines have been observed after excessive indulgence in the remedy. In view of the fact that in rheumatism and gout, the disease for which the lemon cure is most commonly recommended, the heart is extremely liable to be affected, the necessity for caution will be evident. We do not by any means, however, deny all value and efficacy to the "lemon cure," especially as experience in the treatment of rheumatism and gout has proved that the vegetable acids contained in the vegetable diet usually prescribed in these diseases are of the greatest possible benefit.

LEMON JUICE. The juice of fresh lemons is used for various purposes.

1) It is used by adherents of the Natural Method of Healing as a substitute for the ordinary pernicious vinegar (see ibid), in imparting an acid flavor to certain viands, and in the preparation of salads, lemonade, etc.

2) Lemon juice, warmed, if possible, and sparingly diluted, is an excellent means of promoting perspiration. Administered in this form, it usually induces free perspiration in patients in whom the pack and steam-bath has completely failed to produce this effect.

3) It has a stimulating effect on the kidneys, and its administration is followed by increased secretion of urine. On account of its diuretic

and sudorific action, it is commonly used in the treatment of rheumatism and gout. (See "LEMON CURE.") We must, however, again repeat our caution against overdoing the remedy, as gastric catarrh and other digestive disturbances invariably result from the immoderate use of lemons.

Lentils, see Index.

Lentil Soup, see Index.

Lepra, see "LEPROSY."

LEPROSY (from the Greek word lepra) was, as is known from the scriptures, formerly a common complaint in Central and Southern Europe, Egypt and Asia Minor. After the introduction of the Mosaic laws, the various hygienic precepts and the prohibition of the consumption of pork in Judea, leprosy occurred less frequently there.

In Europe, lepers were separated from the healthy members of the community and compelled to live apart.

SYMPTOMS.—Leprosy, or Elephantiasis, consists in knotty formations in the skin of the face, hands and soles of the feet. The knots are red in color and vary in size from that of a lentil to that of an egg; sometimes they heal and leave the skin smooth. Finally gangrenous inflammation sets in, and single parts of the body rot off entirely. The formations may extent to the mucous membrane of the mouth, larynx, eyes and nose and destroy the voice, sight and smell.

CAUSES.—The principal cause is undoubtedly great uncleanliness, as a result of which the activity of the skin becomes entirely suspended and the circulation of the blood and the humors defective.

In consequence, the secretion of used-up substances becomes faulty and they ferment in the system. Wand-shaped bacilli, in size about equal to the radius of a blood-disk, are the product of this fermentation.

Leprosy is also said to be infectious, by transmission of the morbid matter to another person predisposed to it. It is likewise hereditary.

TREATMENT.—A regenerative treatment with careful diet is generally necessary. The Natural Method of Healing is more efficacious than any other in this disease.

As a preventive, the principal requirement is cleanliness and daily full lavations, and full baths of short duration are to be recommended in hot countries. See also "SKIN DISEASES."

LEUCOCYTHEMIA (white blood). In this disease the white blood corpuscles are materially increased, and people affected with the disorder have a peculiar white, almost grayish-yellow, and later, a wheylike complexion.

SYMPTOMS.—Besides this strange appearance, there is a considerable swelling of the spleen, liver and lymphatic glands, depression, disturbance in the digestive organs, an inclination to hemorrhage, emaciation, etc.

CAUSES.—These are supposed to lie in the splenetic and lymphatic glands, as peculiar changes take place in these organs which form the blood.

TREATMENT.—Must be strengthening. If after some length of time no improvement sets in (favorable results cannot be expected here in a short period), a preliminary or regenerative treatment should be applied. Plenty of pure air in and out of doors, and sleeping with the window open are, in such cases, of the greatest importance. For Modes of Application, see Index.

Lice, see "VERMIN."

LICHEN is a cutaneous eruption of light or dark red color; there are little grains, the size of a millet, at the point of which the skin separates after some time, and exfoliates in white scales, while causing more or less irritation. The disease is not of rare occurrence; it is often also accompanied by fever.

As long as the affection does not become very severe, it causes the patient little or no trouble whatever; but when the skin begins to crack and immovableness of the affected part (*e. g.*, the hands) sets in, it becomes painful and prejudices the patient's voluntary actions.

The course of the disease is usually wearisome and protracted.

TREATMENT.—Frequent lukewarm (86° to 90°) baths, or tepid (73° to 77°), mild wet rubbing of the whole body.

A sweating cure by means of steam-baths, or dry packs, followed by cool lavations, one to three times a week. Non-stimulating diet.

With fever and violent irritation, baths as well, or soothing full packs.

If this does not answer, a regenerative or preliminary treatment must be adopted. For Modes of Application, see Index.

Life Awakener, see "BAUNSCHEIDT'S INSTRUMENT."

LIFE, HOW TO PROLONG.

By Dr. EBING.

Of health, as of money, it may with truth be said, that we first learn its value when we have lost it. Health is not only the condition of real enjoyment of life, but the source of beauty and grace. He who is healthy, is beautiful; those who are unhealthy tend to lose flesh, and excessive loss of flesh robs us of beauty.

A healthy person, whose blood courses gaily through his veins, is

generally cheerful and happy. How many, however, can be said to be healthy in this age of steam and electricity? Whereas the average age of man at the beginning of the century, according to published statistics, was thirty-five, this figure has been lowered to thirty at the end of it.

Although the present generation bears the seeds of disease in it, there is nevertheless a means of prolonging life in spite of predisposition and actual disease. This means, however, does not consist in resorting to medicines and quack remedies, but in carefully regulated habits of life, in a proper balance of our powers, in knowledge of injurious influences and of the proper manner to guard against them. Everybody, therefore, should early learn to observe himself, in other words, should attain to a knowledge of his physical constitution and its weakness, and regulate his life accordingly.

A knowledge of his constitution is as important for a man's health, as the observance of the old maxim "Know thyself" is for his mental and moral well-being.

There are, it is true, persons who imagine that rules of health are superfluous, but even the most powerful constitution cannot sin against nature's laws with impunity, and the evil results of an ill-regulated life never fail to appear sooner or later. Everybody, therefore, should learn to know on what his health depends, how easily it may be lost, and how to guard against this loss.

Life favors only those who love it; what we love we seek to retain, and not to squander.

LIFE AND HEALTH, RULES FOR. He who desires to live long, should observe the following rules:

1) Attention to the action of the skin should be practised from early youth upward.

2) Breathe pure air day and night, and attend to the regular action of the bowels.

3) Life should be divided into work, rest and recreation. A man, whose occupation involves much bodily exertion, should seek his recreation in mental work; the brain-worker, on the other hand, should devote some of his leisure time to muscular exercise. Body and mind are alike exercised and strengthened in this way.

4) Regular habits of life are of the utmost importance. "Early to bed and early to rise makes a man healthy, wealthy and wise." Meals should be taken at fixed times, and regular hours set apart for work and recreation.

5) Moderation should be practised in all forms of pleasure. Diet should be simple, non-stimulating, and at the same time nourishing.

Drink sparingly, but eat plenty of vegetables and fruit. Such things as coffee, tea, alcoholic beverages and tobacco should be avoided altogether or indulged in in great moderation.

6) Early marriage is conducive to long life.

See also "HEALTH, CARE OF."

LIFE, TEN GOLDEN RULES OF. 1) Never put off till to-morrow what you can do to-day. 2) Never let anyone do for you what you can do yourself. 3) Don't spend what you haven't got. 4) Never buy anything that you don't require, however cheap it may be. 5) Pride is harder to bear than hunger, thirst and cold. 6) We never regret having eaten too little. 7) We never find irksome what we like doing. 8) What have we not suffered from misfortunes that have never happened. 9) Touch everything with a light hand. 10) Never speak in anger without long consideration.

Light, see Index.

Light and Air-Baths, see "AIR AND SUN-BATHS."

Light-Baths, see "ELECTRIC LIGHT-BATHS."

LIGHT, APPLICATION OF COLORED. It having been noticed that sensitive patients are affected by the brightness or dullness of the weather, an attempt has been made to influence the nerves of patients under treatment, by allowing the light to enter the sickroom through glass, the colors of which are varied to soothe, or to stimulate, as may be desired. Red light is decidedly stimulating in its effect, and blue or violet acts soothingly.

The experiments in this direction cannot, however, be looked upon as conclusive, so that it is impossible to give a final and decisive opinion on the value of this method of treatment, which, if successful, could be adopted by adherents of the Natural Method of Healing.

Further information on this subject will be found in Professor *Babbit's* work, "Principles of Light and Colors," and in the extract made from the same by Dr. *von Langsdorf* and published by *Otto Nemnich*, of Carlsruhe.

LIGHTNING, EFFECTS OF. If anybody has been struck by lightning, and there are still signs of life, stimulating means must at once be applied. The patient is quickly undressed, and his forehead, temples, chest, and back must be rubbed with cold water of 66°. A spoonful of fresh water should also be given.

If life returns in this way, he must, after some time, take an 80° to 86° (lukewarm) bath, his skin being rubbed vigorously all the time, after which follows a neck and back affusion with 72° to 80° (lukewarm) water, succeeded by vigorous dry friction. This may be re-

peated at intervals of from four to six hours, *i. e.*, till the patient feels rather better. Full enema (80°), and after stool a half one of 66°. Covering the patient, all except his head, with a few feet of earth has proved very efficacious in accelerating recovery.

In very critical cases, electricity and artificial breathing may be resorted to.

The treatment of the burns, if any, which usually heal with great difficulty in consequence of the deep-reaching effects of lightning, must be as prescribed under the head "BURNS."

For Modes of Application, see Index.

LIMBS (Extremities). By the limbs we mean the arms and legs, the former being called the upper and the latter the lower limbs or extremities.

Limbs Gone to Sleep, see "FORMICATION."

Lime Blossom Tea, see Index.

Linen, see Index.

Linseed, see Index.

Linseed Meal Poultice, see Index.

Linseed Poultice, see Index.

LINT, which consists of linen scraped to shreads, is used for dressing wounds. Old linen, carefully cleansed, is the most suitable. Nowadays lint is very seldom used, as it has been supplanted by cotton-wool specially prepared for surgical purposes.

LIPOMA, OR FATTY TUMOR, is the name given to an accumulation of fat in any part of the body, where, under normal conditions, there should be little or no fat at all. These round or flat patches of fat have their seat below the skin in the fibre of the underskin, and generally develop very slowly, attaining, however, at times to enormous proportions. Fatty tumors cannot be looked upon as malignant formations, and are not dangerous, unless, by reason of their inordinate size, they cause pressure on some neighboring vital organ. In such cases, removal by operation must be resorted to.

TREATMENT—As in "ENCYSTED TUMOR."

Lips, Cancer of the, see Index and "KNEIPP CURE."

Lips, Chapped, see "SKIN, CHAPPED OR CRACKED."

Lister's Method, see "OPERATION."

Liver, see "CHEST AND ABDOMEN, ORGANS OF THE."

LIVER, CANCER OF THE. A very troublesome disease, but by no means of rare occurrence, it mostly attacks people in the prime of life

or later. It appears either as an independent disease or as a consequence of cancer in other organs (*e. g.*, medullary sarcoma).

Symptoms.—Round, little knots and nodules on the liver, perceptible to the touch on the liver and gradually increasing in size. Next, hepathalgia, jaundice, ascitis and great disturbance of the digestive organs, wasting sickness, and complete loss of strength.

Treatment.—When sufficient vital force still remains, a mild regenerative or preliminary treatment should be adopted; in cases of extreme exhaustion a strict strengthening treatment to be applied, with gentle stimulation of the skin. When strength begins to return, pass over to regenerative treatment. See also under "Cancer" and "Liver Diseases in General."

Liver, Chronic Affection of, see "Bad Health."

LIVER DISEASES. The majority of these are always the result of some other important disease, such as affection of the heart, lungs, or general dyscrasia. Their course is generally very protracted. The principal ones are described and treated under the respective headings.

LIVER DISEASES IN GENERAL, TREATMENT OF. A tepid abdominal compress (73°) at night, and if there be pain this should be put on in the daytime as well. A full, wet rubbing (73°) in the morning and two small enemata daily for absorption by the intestines.

Good results are likewise obtained from lukewarm hip-baths (77° to 81°) of ten to twenty minutes' duration and baths (85° to 90°). Fresh air, non-stimulating diet, breathing exercises, fresh water, and regular action of the bowels are important.

In obstinate cases regenerative or preliminary treatment must be applied at least in part.

Treatment by massage (abdomen and chest) and curative gymnastics are advisable in many cases. In addition to the exercises already specified, the double side arm-swing, lateral leg movement, etc., may be applied. For Modes of Application, see Index. See also "Liver, Diseases of the," under Kneipp cure, also "Massage" and "Curative Gymnastics" in Index.

LIVER DISEASE CURED.

I suffered for some length of time from considerable swelling of the liver and general engorgement of the blood, so that I began to get really alarmed. Being strongly advised to do so by many people, I went to the "Albertsbad" Sanatorium, conducted on the principles of the Natural Method of Healing and presided over by Dr. *Meyner* in Hillersdorf, near Chemnitz. By strictly observing the treatment for two months

and through Dr. *Meyner's* skill I feel once again entirely free from the above complaint and therefore publicly express my warmest thanks to that gentleman. I can strongly recommend the "Albertsbad" Sanatorium to all sufferers. *Gustav Hermann Bosse,* Leipsic.

Liver, Fatty, see "Liver, Diseases of the" and "Obesity."

LIVER, FATTY DEGENERATION OF THE, occurs from deposits of fat on the liver, especially in corpulence. Hard drinkers and people affected with tubercles are often liable to this disease.

Symptoms.—The liver being considerably enlarged exerts a pressure on the neighboring organs, particularly when the patient lies on his left side; he suffers also from shortness of breath, the liver feeling soft and dough-like to the touch.

Treatment.—Steam-baths or steam-baths in bed (No. 1), three to four a week, the former succeeded by a full pack, and both by a lukewarm bath (88°) and affusion on the region of the liver.

Next, stimulating abdominal compresses at night, with massage (consisting of kneading and stroking the abdomen and the part affected). The abdominal integument may be somewhat stretched.

If the patient is unable to find occupation in the country, the treatment indicated above must be most strictly carried out. Strengthening treatment with very spare diet and plenty of out-of-door exercise is also advisable. If the result is not satisfactory, a regenerative or preliminary treatment should be adopted. See also "Liver Diseases in General, Treatment of," and treatment of "Obesity."

LIVER, HYPERÆMIA AND ENLARGEMENT OF THE, arises from an increased influx or diminished afflux of blood during digestion.

After every hearty meal an increased flow of blood to the liver, as is known, takes place, the copiousness and duration of this supply of blood being proportionate to the amount of food partaken of. Should the meal have been only a moderate one, this increase of blood quickly ceases again.

Symptoms.—Dull pains in the region of the liver, feeling of repletion and tension, shortness of breath, depressed digestion, constipation, headache, etc.

Treatment.—A stimulating full pack daily, or steam-bath in bed (No. 1), with thick extra compresses on the region of the liver, followed by a lukewarm bath (88° to 90°), with affusions of water of 84° to 85° on the affected part.

As soon as the pack feels irksome, the patient should be unpacked and bathed or rubbed with lukewarm water (77° to 81°); next repeated

soothing compresses (77° to 85°) should be applied to the diseased part, but changed at once on becoming uncomfortable, also soothing abdominal compress at night and extra compress on the same part and stimulating leg packs. For the rest, vegetarian or mixed diet according to the patient's condition, avoidance of liquids, particularly of alcoholic beverages. Fresh air and enemata for constipation and as a derivative remedy.

Treatment with massage is also necessary, especially massage of the abdomen in the form of strokes on the region of the liver, as well as curative gymnastics, forward and lateral body movement, semi-rotary body movement, elevating body movement, felling movement, alternate sawing movement, also Group IV, in order to regulate the circulation in the whole body. For Modes of Application, see Index. For further information on Massage and Curative Gymnastics, see Index.

LIVER, INDURATION OF THE, is synonymous with chronic hepatitis or inflammation of the liver, and the same treatment is to be applied for the one as for the other.

TREATMENT WITH MASSAGE.—Cautious friction several times daily, as well as gentle stroking, kneading and tapping the region of the liver, and massage daily as in "STRENGTHENING TREATMENT."

INDURATION OF THE LIVER CURED.

By Prof. TRALL.

J. Foster, of Pembroke, aged fifty-eight, though tall and well built, was constitutionally predisposed to induration of the liver and constipation. When he entered my institution he had, for several years, suffered from this disease, so that his life was seriously threatened; in a few days he felt considerably relieved, and in less than three months left us in the enjoyment of excellent health.

LIVER, INFLAMMATION OF THE, Acute. Followed by abscess, etc. On examining the liver, the swelling is perceptible and hard to the touch.

The inflammation arises either from external injury to the liver through the abdominal integuments or from the diseased condition of other internal organs.

If the inflammation arises from external injury, the course of the disease is always a violent one. If due to other causes, it can continue for years, till an abscess attains a large size and gives rise to acute symptoms.

When the abscess bursts, suppuration takes place either externally, through the abdominal integuments, or internally in the abdominal or thoracic cavities, according to the position of the abscess and the diseased condition of the surrounding tissues. Inflammation of the peritoneum

or pleura frequently sets in in consequence of this discharge, and a fatal issue is common. In favorable cases, which, however, are rare, the abscess becomes indurated, shrivelled, and cicatrized.

TREATMENT.—Non-stimulating diet, daily soothing full packs till the body feels warm, with extra compresses on the region of the liver, followed by a lukewarm bath (86° to 89°), with gentle affusions over the painful parts. The patient should then be put to bed to get warm.

The compresses on the liver, outside the pack, should be continued and combined with stimulating leg or calf-packs. Either half steam-baths, or half or three-quarter steam-baths in bed (No. 1) should be given three or four times a week. Plenty of water should be drunk; this may be flavored with a little fruit syrup, in order that the patient may be induced to drink copiously. Thereupon abdominal compress with extra compress on the region of the liver. For the rest, strengthening treatment. Plenty of fresh air, open windows at night, enemata in case of constipation and as a derivative remedy. For Modes of Application, see Index. See also the treatment recommended for "LIVER, DISEASES OF THE."

LIVER, INFLAMMATION OF THE, Chronic—Is chiefly met with in hard drinkers. Pregnant women and women in childbed are also liable to it.

The course of the disease is slow; the liver is at first much enlarged, but afterward gradually decreases in size, becoming finally smaller than in a normal condition in consequence of shrinkage of the cells, whereby the functions of the liver gradually cease. Finally jaundice and abdominal dropsy make their appearance. The disordered condition of the liver is, in this complaint, also perceptible to the touch through the abdominal wall, the organ having sharp, hard edges, and a rough, knotty surface. Jaundice is a frequent complication.

TREATMENT.—As in the acute form. If hard spots be felt on the liver, the latter must be steamed by means of the abdominal hot-water bottle (which see), curative gymnastic exercises, such as bending the body backward and forward, lateral body movement; raising the trunk, felling movement, sawing movement, etc., are sometimes useful. The disease must not be neglected too long or a cure will be impossible. See also "LIVER, DISEASES OF THE," under Kneipp cure, also Index for more on the subject of Massage and Curative Gymnastics.

CURE OF INFLAMMATION OF THE LIVER.

From Dr. KOERNER's work "The Surest Cure of Febrile Diseases."

Mrs. *P.*, an old lady, sixty-three years of age, suffering from hepatitis, sent for me on the sixth day of her illness. She had been treated medicinally with the result that her symptoms increased in severity so that she

determined to try the Natural Method of Healing. The region of the liver was very painful, the abdomen inflated, fever high, thirst excessive, bitter taste in the mouth, with inclination to vomit. The very first compresses had such a favorable effect that the pains abated, and she experienced quite a pleasant sensation when wearing the compresses, whereas she had previously been beside herself with anguish and restlessness. Her cure proceeded rapidly; after a week's time she was able to leave her bed, and felt so well that she could not speak highly enough of the treatment. See also report of cure under "CARDITIS."

LIVER, RETRACTION OR SHRIVELLING OF THE, is chiefly caused by overindulgence in alcoholic beverages, for which reason this disease is often called "drinker's liver." The first symptoms resemble those of chronic gastric catarrh. During the course of the disease the liver is first enlarged and then decreases in size; swelling or enlargement of the spleen, abdominal and dropsical swellings of the arms and legs then ensue. Digestion gets gradually worse, so that the patient finally becomes quite emaciated.

TREATMENT.—Daily cutaneous treatment by the application of baths and wet rubbing of the whole body. Two mild steam-baths in bed each week, with extra compresses on the region of the liver, bath to follow, then gentle stroking of the liver either in bed or when up. If there are dropsical swellings, the treatment prescribed in dropsy should be applied. In both cases, regenerative treatment should be applied.

For Modes of Application, see Index.

LIVER, WAXY OR ARMYLOID, occurs only in diseases accompanied by general degeneration of the blood, such as syphilis, cancer, tuberculosis, rhachitis, etc.

SYMPTOMS.—The greatly enlarged liver is perceptible to the touch, and a deposit of fatty matter takes place, protuberant nodules of fat being sometimes formed on the liver.

Waxy kidneys and waxy spleen generally accompany the disease. Dropsy finally sets in and jaundice in a light form is sometimes met with in later stages.

TREATMENT.—The treatment must, in the first place, be directed to the removal of the primary disease. In the second place the same treatment must be adopted as in fatty degeneration of the liver but without steam-baths, steam-bath in bed No. 1 being substituted. A lukewarm hip-bath (77° to 81°) once a day, during fifteen minutes, is also advisable. For Modes of Application, see Index.

LIVER, YELLOW ATROPHY OF THE. A disease running an exceedingly quick course, and is characterized by fever, violent pains in

the region of the liver, jaundice and a yellowish-colored urine. The liver gets much reduced in size in a very short time.

Women during pregnancy or confinement, and excessive drinkers are principally liable to this disease.

All severe liver diseases may result in atrophy of the liver.

TREATMENT.—One or two lukewarm baths of short duration (85° to 88°), daily, succeeded by full pack and extra compresses on the region of the liver. Next constantly repeated cool compresses 58° to 66°) on the same place, to be changed when dry, and combined with stimulating calf-packs.

For the rest plenty of fresh air, strictly non-stimulating diet, and enemata both for constipation and for derivative purposes.

In this disease the treatment has to be commenced early if it is to be of any benefit. For Modes of Application, see Index. See also treatment "LIVER, INDURATION OF," and "LIVER, DISEASES OF," under Kneipp cure.

Local Baths for Hand, Arm, Elbow and Leg, see Index.

Local Rubbing, see Index.

LOCK-JAW. Is a persistent convulsion, attacking a person who all the time retains his consciousness. Proceeding from the spinal cord, it seizes in the first place the motor nerves, next usually the masseters and the muscles of the trunk and neck, and may arise from inflammation, a cold, or wound, etc. But the condition originates principally from shot or incised wounds, *e. g.*, where foreign bodies remain behind, and particularly when the person thus affected with a wound is exposed to sudden changes of temperature.

SYMPTOMS.—Attacks of cramp (lasting for some minutes, but at times also as long as an hour), which in the beginning occur at long intervals, but gradually return more frequently and more violently. There is an uninterrupted convulsive tension of the muscles, which are as hard as stone and exceedingly painful.

If the facial muscles are attacked, the patient presents a peculiar and even painful appearance.

The attempt to masticate or swallow and even a touch, or other accidental causes may produce fresh attacks.

When this malady lasts for some time, the sufferer perishes from debility; but suffocation may supervene during the attacks.

TREATMENT.—Remove the causes and the primary affection which led to the excessive weakness or the malady. Next, rub the body vigorously with warm dry hands or dry cloths and follow with the application of a dry or wet full pack and place a hot-water bottle, filled with boiling

water and wrapped in a wet towel, to the feet. See "HOT-WATER BOTTLES"; all this to be followed by a tepid (69°) rubbing of the whole body with a wet towel

After perspiration has set in, not dry but wet packs only should be applied.

Vigorous cool rubbing of the feet and legs, small enemata, stimulating abdominal compress at night, perhaps also calf-pack, fresh air, drinking fresh water and non-stimulating diet are requisite. Vigorous rubbing and stroking of the whole body may be tried during a steam-bath or cane-chair steam-bath.

For general affection a strengthening treatment should be applied, and careful attention paid to cutaneous action by a daily vigorous (73°) wet rubbing of the whole body. For Modes of Application, see Index.

Longsightedness, see Index.

LOSS OF POWER in the Shoulder or Hip-Joint, Legs, Arms and Abdomen, Back, Trunk, see also "PARALYSIS," particularly "CURATIVE GYMNASTICS" and the movements prescribed therein.

Louse, see "VERMIN."

Lower Arm, Pack for, see Index.

LUMBAGO. This term is employed to designate sudden pains in the lumbar region, felt after any excessive muscular exertion such as lifting heavy weights, stooping or sudden change of position while lying down.

A superficial form of the disease can arise from a strain on some group of muscles or muscular fibre. The more deep-seated disorder is due to congestion in the spine.

TREATMENT.—Rest, steam-bath in bed with extra compresses on the lumbar region, followed by a lukewarm (77°) wet rubbing of the whole body and by massage (striking). Steam compresses in alternation with cool compresses should also be applied to the painful parts. The lumbar region should also be bathed with warm water (95° to 100°) mixed with a third or fourth part of vinegar. In case of a predisposition to this disease or when the symptoms are of a rheumatic nature, the treatment given for rheumatism, with strengthening treatment, should be followed. See also "LOINS, PAINS IN THE."

MASSAGE.—Relief is sometimes obtained by rubbing and stroking the painful parts for about ten minutes. The parts may also be kneaded if the pain is not too severe. For Modes of Application, see Index. See also "LUMBAGO" under Kneipp cure.

CURE OF RHEUMATIC LUMBAGO.

(From the Journal "The Natural Healer.")

One evening in the autumn of 1856 a fisherman brought his son, a healthy looking boy of twenty years of age, to me in a wheelbarrow. I was at that time the director of the Sanatorium in Brunnenthal near Munich, now belonging to the heirs of Dr. *Steinbacher*. The man told me that he had to carry the boy home from the field where they were working because he had suddenly been seized with a pain in his loins while digging for potatoes, which made it impossible for him to go on with his work or to walk home. He begged me to cure him speedily as he required him for work. I told the boy to raise himself from the barrow, which he, however, could not do without the help of an attendant. I then had him taken to a room, and applied a fourfold wet linen abdominal compress, wrapping him well up in a dry blanket and feather bed. I also made him drink plenty of milk warmed, with the addition of a little water and sugar. In an hour or two he was perspiring freely; I kept him an hour longer in the pack, and then gave him a shallow bath, during which he was vigorously rubbed by two men. During this process he cried out lustily whenever the lower part of his back was touched. In ten minutes I had him taken out of the bath, and well dried, I then gave him a fresh wet abdominal compress, and had him placed on the bed, which again caused a cry of pain. The boy passed a tolerably good night, and felt decidedly better in the morning; I now ordered two dry sweating packs for the day with wet abdominal compress, the boy remaining in the pack for an hour in a free perspiration with the window open. He then had a bath with vigorous rubbing at the same time, even as far as it could be borne, rubbing the stiff and painful places, which, however, did not cause him so much pain as on the first occasion; in the intervals between the packs he had to remain in bed wearing a wet abdominal compress. On the morning of the fourth day, after six of these dry sweatening packs—the boy begged to be allowed to get up at midday and to try and walk about in the open air, and the result of this experiment surpassed our expectations. At first he could only hobble with difficulty, supporting himself on a thick stick, but after two hours' absence he returned with his natural walk. After this, I applied a large wet abdominal compress every night for a few days longer, with a bath and rubbing in the morning, and allowed him, as an experiment, to resume his work. On the eighth day after his treatment he thought that he did not require my help any longer and wished me good bye. The next day his delighted father brought me as a token of recognition for my services (I had refused to take a fee) a beautiful specimen of a trout, which I cooked and ate with great relish.

In addition to the rheumatic lumbago arising from a cold, there is another variety of the disorder due to an outward or excessive movement of the body (*e. g.*, a sudden stoop, raising heavy weights, etc.), causing a strain or rupture of certain muscular fibres or ligaments, and consequently a momentary pain and rigidity, as mentioned above.

THE LUNGS. These are situated in the thoracic cavity (Fig. 224 a to e). They are separated from each other by the mediastinum. The right lung consists of three lobes, the left of two lobes.

Lungs, trachea and larynx.

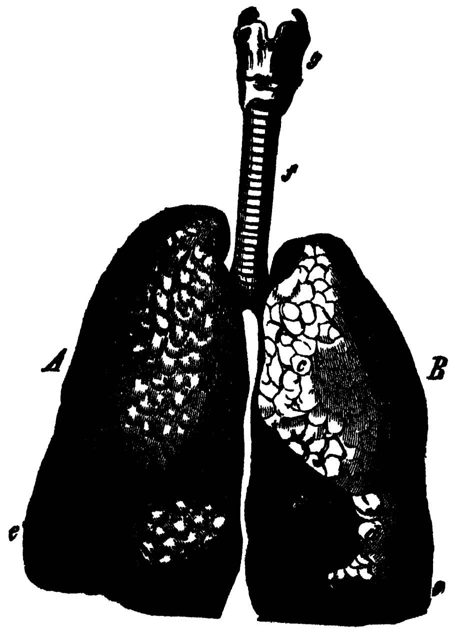


Fig. 224.
A. **right, and** ***B*****. left lung;** ***C*****. cavity for** the heart; *c.*, *d.*, *e.* lobes of the lungs; *f.* **trachea;** *g.* **larynx.**

The lungs belong to the most important organs of the body; they are composed of cells and serve the purpose of breathing (in and expiration); the thorax expands with inhalation and atmospheric air enters the cells of the lungs. (At the same time the blood of the great vascular trunks of the thorax streams more vigorously from the heart to the lungs.) At expiration the thorax contracts and the air passes out again from the cells of the lungs. The function of the lungs consists mainly in withdrawing carbonic acid from the blood and impregnating

it with oxygen; in other words, in purifying the blood, a process which can only be accomplished satisfactorily when good pure air, rich in oxygen, is breathed.

See also "BLOOD, CIRCULATION OF THE."

LUNG CELLS, CONTRACTION AND CLOSING OF THE. (Occlusion.) This may be congenital or contracted, in the latter case as a result of general debility, tumors, bronchial catarrh, and pleuritis. Sometimes only single portions of the lungs are affected, sometimes the

The ramifications of the trachea in the lungs.

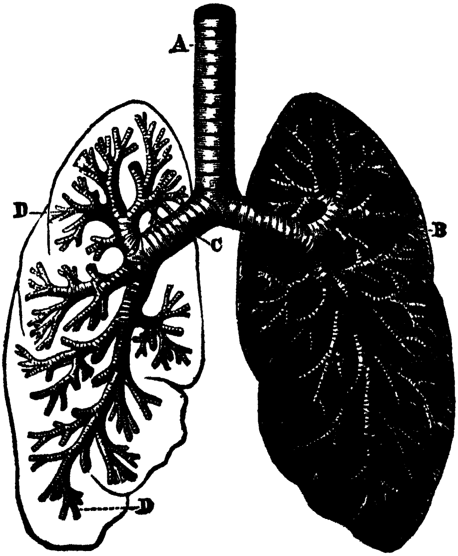


Fig. 225.

A. trachea; *B.* and *C.* its left and right branches; *D.* very delicate bronchi.

whole lung is incapable of expanding and contracting. The disease is most commonly met with in new-born infants.

SYMPTOMS IN INFANTS AND LITTLE CHILDREN.—Insufficient breath, weak, whining voice, inability to cry loudly, feeble suckling of the milk, cool, flaccid skin. In older patients, general decay of strength, dropsical swellings or tumors in the cavity of the thorax or abdomen, want of air, superficial and very rapid breathing. The face emaciated and of a bluish gray color, the nose thin and pointed, and the skin pale and cold.

TREATMENT FOR NEW-BORN CHILDREN.—They must be given at once a short, warm bath (92° to 95°), with suitable vigorous friction, particularly of the legs. After this, the head, neck and chest must be

The lungs and other organs of the chest and abdomen.

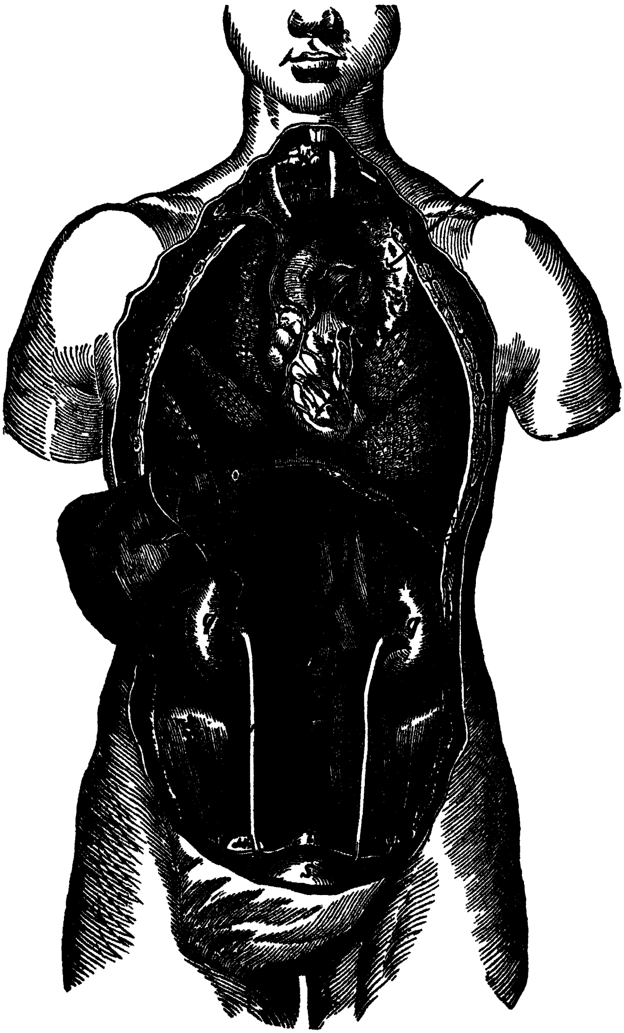


Fig. 226.

a. upper, *b.* middle, *c.* lower lobe of right lung; *d.* and *e.* upper and lower lobe of left lung; *f.* the heart; *g.* pulmonary artery; *h.* pulmonary vein; *i.* great aorta; *k.* upper vena cava; *l.* diaphragm; *m.* cervical vertebra; *n.* right, *o.* left lobe of the liver; *p.* gall bladder; *q.* left and right kidneys; *r.* left and right ureters; *s.* the bladder; *t.* uterus; *u.* left and right ovaria; *v.* left and right fallopian tubes; *w.* vertebral column.

washed and dabbed with a sponge dipped in lukewarm water (82° to 92°), then the children must be put to bed and well wrapped up. In serious cases, artificial respiration (which see) is necessary. With children who have contracted this disease the action of the skin must be attended to, and a derivative treatment adopted with neck douches (56° to 75°), care being also taken to secure plenty of fresh air. For the rest a strengthening treatment. In the case of new-born infants care should be taken to ensure vigorous breathing of fresh air from the very beginning, particularly if the birth was a difficult one. For Modes of Application, see Index.

LUNG CELLS, DILATATION OF THE, or dilatation of the lungs called also Emphysema of the lungs. This consists of a morbid expansion of the cells, by which the lungs are filled with air to an inordinate degree and are, owing to a loss of elasticity so relaxed, as to be unable to expel the air properly, in consequence of which a sufficient amount of fresh air cannot be taken in.

SYMPTOMS.—Shortness of breath, difficulty of breathing, violent palpitation of the heart, abdominal complaints, enlargement of the liver, a feeble digestion, cough, expansion to deformity of the thorax, audible rattling in the chest, weariness, general lassitude.

THE CAUSES of this disease are difficult to determine; apparently they are attributable to protracted cough (especially whooping cough), excessive exertion of the lungs in speaking, singing and blowing instruments, running, etc., and particularly over-exertion in breathing induced by some internal or external causes.

TREATMENT.—In the first place very deep vigorous expirations should be made several times a day in order to discharge the bad and inhale fresh air. (See on this subject "BREATHING EXERCISES.") When the weather is not too inclement the patient should sleep with the window open. Impure air, dust and smoke must at all times be avoided. A foot steam-bath in bed with soothing trunk pack, the sheet being only moderately wrung out in lukewarm water (81°) should be given for an hour daily, to be followed by wet rubbing of the whole body (75°). A preliminary or regenerative course, and a treatment bearing on the primary disease, as well as fresh air, and enemata are necessary. Air-baths, light-baths and sun-baths, and massage of the whole body are recommended. Reports of cures of various pulmonary diseases may be found under "PHTHISIS." For further information on Kneipp cure and Curative Gymnastics as well as Modes of Application, see Index.

LUNGS, DISEASES OF THE. Bronchial catarrh or pulmonary catarrh appears in a variety of forms and stages, acute as well as chronic, and easily arises from coddling whereby the mucous membrane becomes hyper-sensitive. Next to a cold in the head it is perhaps one of the most frequent of the maladies which are caused by chill. Infants, aged and infirm persons are most frequently attacked by it and in their case it assumes a graver aspect.

SYMPTOMS.—Catarrhal fever, the feeling of soreness behind the sternum, more or less violent shivering fits, dry cough with but little phlegm, difficulty of breathing, want of appetite, depression, heaviness in the head, giddiness especially in case of influenza which is a more or less malignant catarrhal fever. On sounding the chest a rattling, whistling and buzzing noise is heard. There is however but little or no fever.

CAUSES.—Chill, especially in spring and autumn, and chiefly from the sudden cooling of the body after perspiration, breathing of cold or vitiated air, and of particles suspended in the air as dust, flour, etc., of sulphuric or sulphurous acid, chlorine, nitric acid vapor, smoke, etc. Also diseases of the lungs, typhoid fever, smallpox, scarlet fever, measles, tuberculosis, anæmia.

Chronic bronchial catarrh is fully as prevalent as the acute form and especially in cold regions, as also in trades which necessitate working in air full of dust, etc. It is indicated by a constant racking, sometimes cramp-like cough, discharge of phlegm, difficulty of breathing and a livid complexion.

TREATMENT.—Steam-bath in bed (No. 1) daily, or steam-bath followed by full pack, or perhaps only a stimulating full pack, in each case followed by bath, vigorous rubbing of the skin, then returning to bed to get warm again. This rubbing of the skin is performed in order to effect the secretion of the morbid matter which the blood so tenaciously arrests at the mucous membrane in question. At night, stimulating throat, trunk and calf-packs, or shoulder pack instead of throat pack. In the morning, lukewarm (73° to 82°) wet rubbing of the whole body. Above all, breathing exercises, keeping of an even warm temperature, plenty of mild fresh air, sleeping with the window open, and non-stimulating diet. To loosen the dry cough apply a few steam-compresses.

Enemata for constipation. In severe chronic cases strengthening treatment. In obstinate cases regenerative or preliminary treatment.

Massage of the chest is also to be recommended in chronic bronchial catarrh in the form of extended stroking of the whole chest, as well as

chest pressure and trunk pressure with vibration, during which the patient is to breathe very deep and full. Also massage of the larynx and the throat, chest pressure*) and trunk pressure with vibration.**)

For further information on "MASSAGE" and "BREATHING EXERCISES" see Index.

SECOND TREATMENT.—If the patient suffers from shivering and defective cutaneous secretion, give a light steam-bath of half an hour's duration, followed by wet rubbing of the whole body (77°) or lavation. Every day or every other day stimulating full pack or steam-bath in bed (No. 1), beginning with water of 81°, and gradually lowering the temperature until it reaches 73°, also by degrees, trunk pack (73°), and wet rubbing in the morning. If the patient's condition warrants, also give sun-baths and observe generally the rules of strengthening treatment. Plenty of fresh air, enemata. For Massage, etc., see above.

THIRD TREATMENT.—At night, leg, abdominal and shoulder pack (73°). In the morning, wet rubbing of the whole body (73°). Mouth-baths of ten or fifteen minutes' duration five or six times a day followed each time by gargling and drawing water up the nostrils; morning and evening kneading and stroking the throat downward (whereby, however, the bronchi must not be touched), and stroking the upper part of the chest from the sternum along the ribs; abundant ventilation of the workshop, etc., (if possible, work should be done with the window open); deep breathing in pure air, and during work all breathing should be through the nostrils. We recommend a trial of *Wolff's* cheap cotton respirator. (To be had of the Apothecary in Frankenstein in Silesia, price 25 cents). The diet must be strictly non-stimulating, plenty of good milk, either cool or lukewarm, and also thin gruels.

For Modes of Application, see Index.

CASE OF LUNG DISEASE AND CHRONIC NASAL CATARRH

Cured in the BILZ Sanatorium.

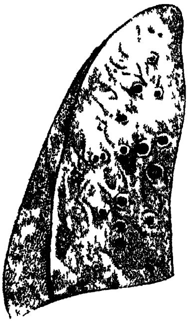
Mr. *N. P.* of Riga in Russia, twenty-eight years of age, came to me last year. He had had trouble with his lungs for several years, and had become anæmic in consequence; at the same time he suffered from chronic nasal catarrh. When he rose in the morning, a short dry cough brought up a viscid, dark phlegm. He had already employed a number

*) The patient lies on his back and some one lays his hands on the chest, and during inhalation presses and shakes the chest.

**) The same position and mode of breathing. The attendant presses the trunk from both sides (during exhalation) and shakes it.

DISEASES OF THE LUNGS AND LIVER

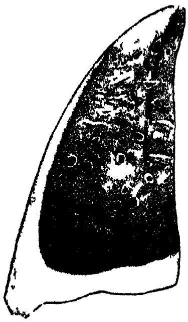
IV



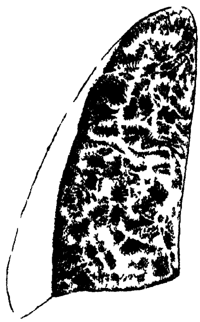
1. Normal Right Lung.



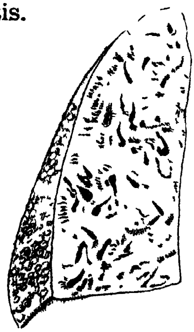
2. Tuberculous Right Lung.



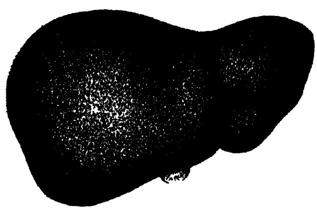
3. Inflammation of the Lung and Pleuritis.



4. Miner's & Coal Heaver's Lung.



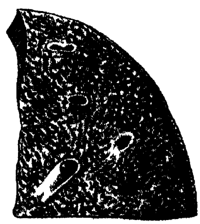
5. Stone Mason's Lung.



6. Normal Liver.



7. Constricted Liver.



8. Fatty Liver or Nutmeg Liver. (Section.)

of remedies, creosote pills, etc., for his malady, but all in vain. After a three weeks' treatment in the sanatorium consisting in breathing exercises, douches, gargling, steam-baths, packs, living and sleeping in air huts, massage and non-stimulating diet, the catarrhal affections of the bronchial tube subsided, the dullness of the apex of the lung was arrested, breathing through the nose restored, and an increase of more than four pounds in weight effected in the short time.

CASE OF CATARRH OF THE LUNGS CURED.

I suffered from severe catarrh of the lungs, and had been given up by the doctors. Through a bookseller I ordered the work entitled "Bilz, The New Method of Healing", and to my joy can testify that the instructions contained therein enabled me to attain perfect health in spite of the severity of the winter. *v. Tilp*, Graz in Styria.

CASE OF PULMONARY CATARRH CURED.

In the Bilz Sanatorium.

Miss *F.* of Eisenberg in Thuringia, eighteen years of age, had suffered from catarrh of the apex of the right lung for about a year and a half. In consequence of growing rapidly, the upper part of the body was retarded in its development, the composition of the blood was faulty owing to imperfect breathing; she finally became anæmic, pale, and was strikingly thin, although previously to her illness she had been apparently well and healthy. After an unsuccessful medical treatment she came full of confidence to the Bilz Sanatorium. Here she went through a ten weeks' course, and when she left was absolutely cured. She looked fresh and blooming, her rosy cheeks bore the stamp of health, she had put on fourteen pounds, and was stronger and better than she had ever been in her life before.

See also "Reports of Cure."

CASE OF CATARRH OF THE LUNGS, STOMACH AND INTESTINES.

By Edmund Schneckenberg, Reitzenhain.

(From the "Journal for Hygiene and Natural Therapeutics.")

I was requested by the mother of Mr. *Alwin H . . . sch,* musician and householder of Pobershau, to visit her son who was dangerously ill, and I at once gave my consent. I regretted, however, having given it when I heard that the patient was lying in a hopeless state, but the mother begged so hard that I at last agreed to go to her house. The night was pitch dark, and as I entered the sickroom the patient was

praying that an angel might come and help him. In the room were his relations as well as several friends, as his end was expected. I examined the patient, who could hardly speak, and assured myself that he was suffering from severe lung, stomach, and intestinal catarrh together with congestion of the liver, and there was a complete disturbance of nutrition. I learned that the unfortunate man had already been ten weeks in bed under medical treatment, and that his condition had got steadily worse. The cause of his illness was grief at the death from scarlet fever of his son, a strong boy of twelve.

After speaking some words of encouragement to him, and giving some general directions for the night, I began next day, with full confidence in beneficient nature, the treatment of the patient. I prescribed a strictly vegetarian diet, exactly the opposite of what the doctors had given him, (*viz.*: meat and eggs), banished medicines entirely, and ordered frequent dry rubbing of the legs and arms, and two foot steam-baths in bed daily by means of hod-water bottles.

The strength of the patient began to revive, whereupon I had in conjunction with the dry rubbing and steam-baths calf and arm packs alternately and at last was able to ventilate the room frequently. As soon as his improvement was evident I gave abdominal packs and enemata, and toward the end of the year caused him to go out on sunny days, and to practise breathing exercises. On New Year's Eve the patient, thinking himself perfectly well, went to a restaurant without my permission and at midnight went out of doors into the snow and rain to hear the church bells ringing. He had to pay for this inattention and although he went to his lathe occasionally, still his general health did not improve, as it ought to have done if my directions had been implicitly followed. It was not until the warmer weather set in that he was able to look into the future with courage and confidence.

See also the second report of cure under "STOMACH, CATARRH OF THE."

CASE OF CATARRH OF THE APEX OF THE LUNGS COMBINED WITH ACCUMULATION OF PHLEGM IN THE GULLET.

Cured in the BILZ Sanatorium, Dresden-Radebeul.

Mr. *W.*, of Dresden, had suffered from some time of catarrh of the apex of the lungs combined with accumulation of phlegm in the gullet, as well as from violent, and often extremely painful asthmatic complaint, so that he was hardly able to move for many consecutive minutes. At night his cough was especially troublesome.

After a stay of but four weeks in the above mentioned sanatorium during which time he was treated with gentle half steam-baths, Scotch compresses, lukewarm shallow baths, daily inhaling, trunk packs at night and non-stimulating diet, he was entirely cured of his complaint. In the third week of the treatment he could with ease take long walks. and he returned to his profession with renewed strength and spirits.

LUNGS, DISEASES OF THE. Phthisis or Consumption. This is the most widely spread and frequent disease of man. In most cases its progress is slow, and it gradually becomes chronic.

Two varieties of the disease, the acute and the chronic, are met with. The first is called acute pulmonary tuberculosis or miliary tuberculosis, the latter—chronic pulmonary tuberculosis, or pulmonary consumption.

In the acute form the disease, known, as we have said, by the name of acute miliary tuberculosis, a rapid, extensive deposit of gray or yellowish tubercles takes place, more especially in the lungs, but occasionally in the spleen, liver, etc., and death ensues in consequence of general deterioration of the blood with symptoms of violent typhoid fever, before the respiratory functions of the lungs have been seriously interfered with, or the miliary tubercles have undergone further transformation.

Symptoms of the Acute Disease.—Small knotty lumps are formed in the lung and the course of the disease is a rapid one. It is characterized by high fever, accelerated pulse, difficulty in breathing, inclination to sleep, increased tendency to perspire, loss of consciousness, very rapid loss of strength, feeling of oppression in the chest, cough, hoarseness, and many other symptoms, varying according to the organs affected. As already mentioned, the disease may rapidly become fatal, especially when it is super-added to the chronic form (pulmonary consumption), in which case the symptoms are especially severe, culminating in general decomposition and deterioration of the blood.

It is otherwise with chronic tuberculosis, which also by preference selects the lungs for its point of attack, but leaves the system plenty of time, in many cases years, to attempt to throw off the tubercles, or, one might say, to allow the parts attacked by these germs to heal up.

If these attempts are not successful and the degeneration of the blood continues, the tubercular deposits are continually re-enforced and death takes place either in consequence of a more than usually violent attack, or more or less quickly in consequence of the gradual metamorphosis of the tubercles (mollification and suppuration) with symptoms of general consumption, designated as galloping consumption when

the course of the disease is rapid,—chronic pulmonary consumption or pulmonary phthisis when it is slow.

In favorable cases the tubercular masses shrivel up to a small, hard, dark lump and are then eliminated from the system; or, having first undergone a process of mollification and suppuration, they gradually dry up in a yellowish-gray, chalky, sandy mass; their immediate connection with the system is severed and they are rendered innocuous. In other cases again the irritating action of the tubercles on the surrounding pulmonary tissues produces an inflammatory condition giving rise to an exudation which becomes cartilaginous, and in this way also the tubercles are separated from the system and from immediate communication with the circulation.

In the cases just considered the tubercles can, under favorable conditions, exist for years, even to advanced age, without injury to the system. The patient may die finally from senile weakness, or from other causes, continuing meanwhile free from any symptoms of disease. Under unfavorable conditions, on the other hand, such as faulty habits of living, dissipation, excessive exertion, dancing, colds, violent excitement (terror, rage, worry)—under any conditions, in fact, which are liable to agitate and violently accelerate the circulation—the tubercles may be again drawn into the system, giving rise to deterioration of the blood, with a fatal issue in such cases or to inflammation and suppuration of the affected organ.

Besides the lungs, tuberculosis is very liable (like typhoid fever) to attack the mucous membrane of the intestinal canal, stomach, larynx, windpipe, bronchi, spleen, kidneys, testicles, uterus, brain, and meninges. The tubercles can also be deposited in the bones (in early life in the form of scrofula) and in the tissues and integuments contiguous to the organs just mentioned.

Chronic pulmonary tuberculosis, called in bad cases pulmonary consumption, pulmonary phthisis, or simply consumption, like tuberculosis and all diseases of the blood in general, is usually only noticed when in a tolerably advanced stage of development, when the functions of the lungs are already seriously impaired, and the blood is in a condition of tubercular deterioration.

Symptoms of the Chronic Form.—An anæmic appearance of the skin and depressed condition of nutrition, accompanied by a peculiar flat or concave appearance, and feeble action of the chest. Other symptoms are: Difficulty in breathing, or even complete loss of breath after physical exertion, such as climbing hills or steps; frequent piercing pains; catarrh; dry cough; expectoration, thin at the commencement, afterward thicker

most at the top, and after taking as deep a breath as possible (the time during which the breath is held amounts to eighty or ninety seconds). A chest of this strength and capacity would, however, probably cause the spirometer to burst.

The companion picture (Fig. 228) is that of the signal man of a railway bridge, aged forty-three, and has obtained some celebrity in medical

Consumptive Chest.

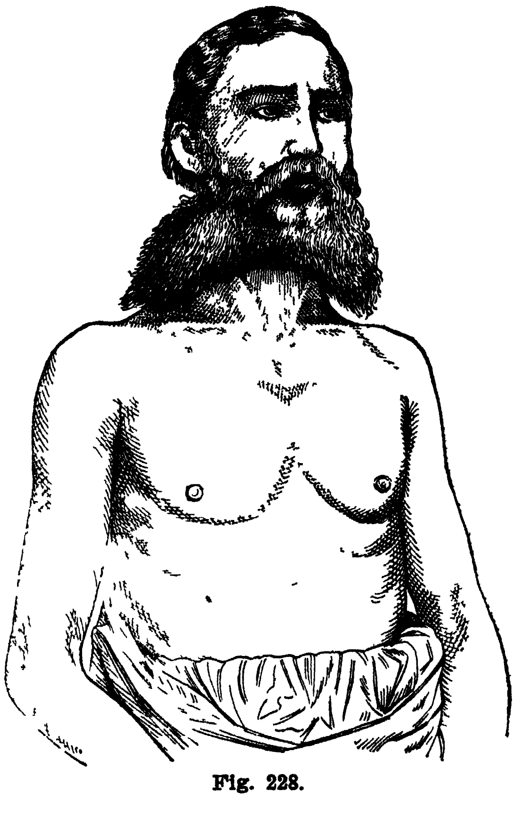


Fig. 228.

circles through being shown in my scientific treatise on the radical cure of chronic pulmonary consumption. As explained in this treatise, the owner of this emaciated body is only able to perform the duties of his calling through the necessity of coming a considerable distance to his work every day from a suburb over three draughty bridges across the Elbe, keeping guard till evening on another such bridge, and going the same way home again.

Height, 5 feet, 6 inches; width across the chest, 2 feet, 9 inches; weight, 125 pounds. In Fig. 227 the shoulders and the chest share the weight between them, whereas in Fig. 228 the whole weight of the shoulder-bone hangs over to the front; on the one hand, a thick-set, extended neck and arched collar-bone; on the other, a thin, flabby neck, and a collar-bone the shape of the handle of a spoon. On the one hand, strong, tense muscles, well padded with fat and moist skin; on the other, thin, relaxed muscles. There is but feeble power of expansion—the breath can only with great difficulty be held for thirty seconds. Here we have the typical candidate for consumption.

A reader of my book, a Dutch official, personally unknown to me, makes the following observations in a letter written from Davos on the 2nd of August of this year: Although I had gone to a high climate on account of my state of health, the result was but small, till a lucky chance brought your book, "The Lung," into my hands. In this book you have put the matter so clearly that I could not for a moment remain in any doubt that only in this way could I be cured of my tendency to consumption.

Although the letter gave no particulars concerning his age, height, etc., a comparison of a photograph which he enclosed, showing his present condition with an earlier photograph, gave abundant proof of the beneficial effect exercised on the nutrition of the whole body by regular "feeding on fresh air," as explained in my book. Although I quite allow that no man can live on air alone, this case nevertheless proves that consumption can be staved off simply by deep breathing. I do not think I should be far wrong in estimating the increase in weight in the foregoing case at about twenty pounds, and I am confirmed in this opinion by the following letter from Switzerland, likewise reaching me from an unknown source.

"An anonymous person (an official in a high position) takes the liberty of hereby conveying to you his sincerest thanks for saving the life of his dear brother. He was in such a feeble condition that he had not been able to walk for four days. A young, intelligent doctor, Dr. *Kr.*, of H., now took him in hand, forbade all medicine and prescribed as a substitute Dr. *P. Niemeyer's* "Principles of the Radical Cure of Consumption." As the patient was unable to take walks on account of the severe wintry weather, two rooms were allotted to his use and he passed an hour of his time in each of them alternately, one room being ventilated while he occupied the other. The windows were kept open at night, notwithstanding his perspiration. In three weeks I got a letter from him, in which he informed me in high spirits that he had increased four pounds in weight. In another month his weight had again

increased, this time by ten pounds, and this increase continued until he had regained his normal weight of hundred and fifty pounds. A course of treatment in Weissenburg and a month's stay on a mountain near Stockhorn completed this remarkable cure. My brother, whom I had given up for lost, has again become a cheerful gymnast and an excellent tenor singer. After this simple, yet thorough cure, my whole numerous family have become devotees of fresh air. The time must surely come when your really inspired teaching will become universally popular. Do not grow weary in your work of reformation."

We will add some reports of cases of pulmonary consumption and other serious lung diseases.

CASE OF GALLOPING CONSUMPTION CURED.

By Edmund Schneckenberg.

"Humanly speaking, your daughter has only three or four weeks to live." It was with these words that Dr. *H*. consoled the parents of a married lady of one and twenty, on whose case he was giving an opinion in writing. This opinion, many pages long, a copy of which was brought to my notice, described the patient's disease as very serious. According to the diagnosis of several physicians, she was suffering from so-called galloping consumption *(Phthisis florida)*, following after various other diseases. One of the doctors who was treating her hoped for some improvement in her condition from a stay in a sanatorium for consumptives which he named. Her very intelligent parents, however, brought her to me instead, being of opinion that the necessary aid could be obtained only through the Natural Method of Healing. This was in July last year. I confess I felt anxious when I saw the patient. She had been in feeble health from her childhood, and she had been treated medicinally for a year in consequence of an inflammation of the hip-joint. A doctor of the orthodox school had treated her, fortunately on her healthy side. After that the lady had to lie for some months in plaster of Paris, and was at last confined to her bed with severe illness in consequence of violent mental excitement and breathing vitiated air. An attack of pleurisy now supervened, and her condition culminated in a severe lung disorder. She suffered from constant fever, so that a continuance of the caseous infiltrations was dreaded. The patient began to recover from the first day of my treatment. Her weight, which was eighty-nine pounds at the commencement, increased by four pounds the first week; in five weeks she was able to go home entirely restored, having increased twenty-six pounds in weight. Was her disease galloping consumption? I cannot say for certain, but

I was gratified at being assured of her health a few days ago.—In the middle of January, Dr. *H.* gave his testimony as follows in a public meeting and before a large audience: "The lady was seriously ill, but her mother, who is present, will remember that I said, 'With God all things are possible.'" Yes, dear sir, here our convictions meet on common ground; we unorthodox practitioners often have occasion to see the wonders that God performs. I will not enter into the particulars of the treatment, my aim was to show that the beneficial effects of the non-medicinal method of healing must in the long run meet with public recognition.

The name and address of the patient have nothing to do with the matter; they are, however, known to the editor.

DISEASE OF THE LUNGS CURED.

(From the "Journal of Hygiene and Natural Healing.")

I had suffered for years from disorder of the lungs; at last I got anxious, as the cough began to trouble me at night, and in spite of copious evacuations through the nose and mouth, the lungs remained unrelieved. I, therefore, applied to Mr. *Canitz* in Berlin, a Natural Healer. Through the summer the latter prescribed daily wet rubbings, packs, gargling with water of 73°, vegetarian diet and deep breathing in the open air. During the second night of the treatment I only coughed once; in the third night I slept without interruption till four o'clock. The lungs became relieved through the nose and mouth in consequence of the treatment; I feel well and completely free from disagreeable symptoms, and desire nothing better than to remain in my present state. I can recommend the Natural Method of Healing to every one. *Th. P.*

See reports of cases under "GASTRIC CATARRH."

Lungs, Excess of Air in, see Lung Diseases "EMPHYSEMA"; also see "LUNGS, EMPHYSEMA OF" in Kneipp cure.

LUNGS, GANGRENE OF THE, is the name given to a disease of the pulmonary tissues in consequence of which the latter decay and become disintegrated. The cause of this is disease and degeneration of the tissues of the lungs, etc.

SYMPTOMS.—Rapid loss of strength, fever, abnormal secretion of phlegm, which in a latter stage is mixed with blood as well as of highly evil-smelling lung tissue.

This disease is of rare occurrence and is found in persons of the male rather than that of the female sex.

TREATMENT.—First, careful nursing in severe cases. The patient must remain in bed and assume a horizontal position. Attention to cutaneous action by means of daily lukewarm or warm baths (88° to 100°), or wet rubbing of the whole body (83° to 86°). Trunk baths (79° to 83°), Scotch compresses in bed, soothing or stimulating, according to the state of the patient and combined with stimulating calf packs as a derivative. Gargling frequently with lukewarm water mixed with a little lemon juice, plenty of fresh, pure air day and night. Non-stimulating but nourishing diet. In general a regenerative treatment to be followed.

Lung Gymnastics, see "BREATHING GYMNASTICS."

LUNGS, HEMORRHAGE OF THE. This malady has its origin in diseases of the lungs and bronchi. It is not an independent ailment, but the result of inflammatory affections of the pulmonary tissues, etc. It occurs in gangrene, phthisis and other diseases as well as in injuries to the lung through cuts or contusions. When in hemorrhage of the lungs not only the blood vessels but also the pulmonary tissues are destroyed it is called pulmonary apoplexy.

SYMPTOMS.—The hemorrhage either occurs suddenly or is preceded by premonitory symptoms, *e. g.*, restlessness, excitement, etc. As soon as the bleeding has commenced, whether it be scanty or profuse, this is called hemorrhage; whether the blood comes from the stomach, or from the lungs, is not always to be ascertained. A certain clue is afforded by the color of the blood, which is generally bright red if it proceeds from the lungs, whereas, if it comes from the stomach, it has a dark chocolate color.

In light hemorrhages no great apprehension need be felt; hemorrhage of the lungs, however, in most cases occurs from rupture of the tiny blood vessels of the mucous membrane and ramification of the trachea, and usually in young, delicate people. In such cases it is either the premonitory or attendant symptom of tuberculosis. Persons affected with it notice at times and often long before hemorrhage makes its appearance that their expectoration is slightly tinged with blood.

TREATMENT.—The lungs must be examined in order to ascertain the locality of the hemorrhage; a cool extra compress must be placed over the spot and renewed frequently. If the hemorrhage is considerable the patient must, above all, remain perfectly still, by preference in a recumbent position; he should not be allowed to speak, walk or mount stairs, etc., as this is calculated to increase hemorrhage. Next, all clothing confining the chest, such as stays, etc., must be removed and a treatment bearing on the primary disease adopted.

Also a tepid three-quarter pack (73° to 77°) should be applied at once with an extra compress, rather wet and four or sixfold on the body; similar to a trunk pack with one, or, if requisite, even three hot-water bottles placed to the feet. See also treatment of "HEMORRHAGE."

If the hands are cool, the hand steam-baths are to be given simultaneously, but in this case the hot-water bottles are not to be placed immediately against the body. The duration of the three-quarter pack is to be forty-five minutes to one hour, and it should be followed by a gentle tepid sponge-bath (73° to 77°). A large linen sheet should be employed for this pack, if the patient is an adult, and folded as described in the second treatment for inflammation of the lungs.

This treatment may be repeated two or three times a day. When the hemorrhage has been stopped, a lukewarm hip-bath (77° to 81°) of twenty minutes' duration is the proper thing to give.

SECOND TREATMENT.—Tepid trunk-packs (66° to 73°), to be changed, if necessary, every five minutes. If required, they may be several degrees cooler.

It is not advisable to raise the patient to apply the trunk pack; compresses on the chest only are to be given, which can be pushed partly under the back from both sides.

In addition, the body must not be covered too warmly, the bed to be kept cool, featherbeds to be entirely discarded, cool, vegetarian diet, especially fruit, etc.; water or lemonade may be given frequently but only in moderate quantities; plenty of fresh air. Enemata both in case of constipation and for derivation. Compare also "HEMORRHAGE."

For Modes of Application, see Index. See also "HEMORRHAGE OF THE LUNGS" under Kneipp cure; Report of cure under "CONSUMPTION."

LUNGS, HYPERÆMIA OF THE, may arise either from excessive determination of blood to that region or from defective exit of the lungs, in consequence of bodily or mental excitement, from thickening of the pulmonary tissues, irritation through inhaling dust, defects or weakness of the heart, etc.

Hyperæmia may also be caused by inflammation of the lungs or suppression of discharges from piles.

SYMPTOMS.—Difficulty in breathing, feeling of pressure in the chest, etc.

TREATMENT.—First avoid the primary cause of the malady. A stimulating full pack with an extra-compress on the chest once a day, the latter to be changed on getting troublesome, and applied frequently when the full pack is not applied. After that, either a lukewarm bath (85° to 88°), or wet rubbing of the whole body (75° to 77°). During

both the wet rubbing and the bath, the legs and feet must be rubbed vigorously.

At night, a stimulating abdominal compress in addition to calf, foot or leg packs, as required. In the morning, after the removal of the pack, wet rubbing, especially vigorous rubbing of the legs, plenty of fresh air, sleeping with the window open, non-stimulating diet, enemata for constipation and as a derivative and massage of the abdomen as well as vigorous kneading of arms and legs twice daily. See also "BLOOD, CONGESTION OF."

For Modes of Application, see Index. Reports of various cases of lung diseases may be seen under "CONSUMPTION."

LUNGS, INFLAMMATION OF THE, CHRONIC, often exists for a long time before it is noticed, and is attended with the same symptoms as the acute form, but without fever.

It appears often as an independent disease, or accompanied by tuberculosis into which it often passes.

TREATMENT.—The second of the modes of treatment given above should be chosen and applied about twice a day. But in this case the wet sheet round the body or chest must not be so thick. Breathing exercises; sleeping with open windows.

LUNGS, INFLAMMATION OF THE, IN CHILDREN, is in reality only a catarrh, spreading from the finest ramifications of the trachea to the lung cells, which discharge a colored purulent secretion. The inflammation only affects single lung cells.

SYMPTOMS.—High fever, very great difficulty in breathing, flushed and hot face. The mucous expectoration is not mingled with blood. The lung cells are full of mucus.

In the most pronounced cases respiration is attended with a whistling noise, the cardiac region contracts instead of expanding, the hot, flushed face becomes pale.

TREATMENT.—The second of the modes of treatment given above is to be applied.

TREATMENT WITH MASSAGE is applied as follows: If the temperature be high, a lukewarm bath (88° to 90°) with douche, or lukewarm sponge-bath (81° to 90°) is given before massage is attempted. To promote circulation, which has become sluggish, neck and back to be rubbed well with hands and finger-tips dipped in oil or warm water (81°), in a downward direction; this, as a rule, ensures alleviation of the pain. Compresses may follow this process, but not until the worst symptoms have disappeared. Massage may also be extended to the region of the

stomach by downward strokes and gentle kneading, passing carefully over the legs and arms. Treatment with massage, however, must only be resorted to on professional advice and must not be performed except by an expert.

CONVALESCENT TREATMENT AFTER INFLAMMATION OF THE LUNGS. It is above all advisable that the patient, when able to leave his bed, should take a daily walk out of doors in fine weather. The object now is to restore to the lobe of the lung, still disabled, its normal activity, by every day repeatedly performing the exercise Figs. 229 and 230 of breathing with the weakened lung.

One-sided deep-breathing.



Fig. 229.

Deep breathing with the left lung, after inflammation.



Fig. 230.

Deep breathing with the right lung, after inflammation.

Deep breathing with one lung is eminently beneficial after inflammation of the lungs and pleuritis. See ibid.

The sound side of the chest is pressed with the hand while the lately affected recovered side is given the opportunity of expanding by raising the arm. If this treatment be omitted, the lately affected side runs the risk of sinking in, or even of getting deformed at the back. Curvatures of the spine take place sometimes in this manner with children; besides deep-breathing with one lung, it is necessary to practice breathing gymnastics. See also "INFLAMMATION."

CASE OF SEVERE INFLAMMATION OF THE LUNGS CURED.

By BERTRAND STAHRINGER, Natural Healer.

I was called at eleven o'clock in the evening, on January 28th, to the coal merchant *L.* in Burgstädt, Bahnhof Strasse, to treat his child, aged eighteen months, who was suffering from acute inflammation of the lungs. On my arrival I found the child at the point of death and learned from the parents that it had been for a week under the care of the medical practitioner *D.* of the place, who had given it up for lost on that some afternoon. He had gone away with the words, "Don't do anything more, it will be all in vain!" I gave the child at once a hasty wet rubbing of the whole body (81°), wet compresses, folded eight times (77°), applied to the chest without cessation every ten or fifteen minutes; the feet, which were very cold, were quickly warmed by means of steam-baths with hot-water bottles and then rubbed with water (73°) as vigorously as was permissible; this treatment was continued all night and in the morning I found the child quieter. The feet were nicely warm, without application of artificial heat, so that I was able to give a half pack of 86° for half an hour, during which time the compresses on the chest were changed every half hour. After unpacking the child I gave another wet rubbing of the whole body (81°), followed by abdominal and foot pack, of three hours' duration without interruption, and compresses on the chest every hour.

The child had already improved considerably by January 30th, asked for something to eat, and after a partial pack, which was only given once a day, I gave it a (90°) bath, which did a great deal of good and enabled me to discontinue the compresses and packs at first for a shorter, and afterward for a longer period. On the fourth of February, as it was a fine day, the child was able to be taken out into the sun at midday for a few minutes, and since then has grown healthy and strong.

During the whole time of the acute stage of the disease, the child drank nothing but cool water with fruit juice, for which later on whole wheatmeal porridge was substituted and the most distant window was opened sometimes in the adjoining room, sometimes in the sickroom itself, so that the child might breathe as much fresh air as possible. When, on January 30th, the doctor who had treated the child before and who had waited in vain for the notice in the papers of the child's death, called once more on the patient and heard from the parents that they "had done one thing more," *viz.*, they had applied the Natural Method of Healing, he became quite indignant and used most uncom-

plimentary expressions with regard to this treatment, adding: "Well! let your child be slowly tormented to death by this quack; I, at all events, would have released it from its suffering long ago."

But the quack did not torment it to death, but gave back to it health and a happy life to the credit of the Natural Method of Healing.

For other reports of cure of inflammation of the lungs, see under "PHTHISIS."

LUNGS, INFLAMMATION OF THE (Pneumonia), appears either as an independent disease or concomitant to various other diseases. such as typhoid fever, measles, scarlatina and other eruptive diseases, as well as whooping cough, etc., and is very frequently the cause of concurrent pleuritis, carditis, pericarditis, meningitis, and nephritis, as well as gastric catarrh. The inflammation may be more or less acute, or chronic, and extends sometimes to small, at other times to large portions of the pulmonary tissues. On account of the importance of the affected organ and the injury easily done to it by external baneful influences, this is reckoned among the most severe and dangerous diseases.

SYMPTOMS.—The inflammation starting from the root of the lungs usually attacks the lower lobe on one side at first and then extends in many cases to the other also.

The more striking symptoms are, sudden and violent shivering lasting from half an hour to several hours, and followed by fever.

Pain is not felt until several hours after the shivering and remains stationary. Next, a more or less strong feeling of pressure and weight, or pricking pains in the chest, sometimes on one side, sometimes on both sides, manifested by hurried, short, rather superficial respirations, in which even the nasal wings seem to participate, and by abruptly uttered words. Frequent cough, generally attended with pain and a reddish or yellowish expectoration, mingled with blood, at first viscid or frothy, and afterward brownish and purulent.

On tapping the chest on the inflamed spot, a dull sound can be heard, and on auscultation, a crackling noise is discerned when the inflammation is near enough to the thoracic wall. This noise becomes more of a rattle when the expectoration gets looser; fever assumes a pronounced form only in the more developed cases of genuine inflammation of the lungs; it generally begins with violent cold shivers, with a full and hard pulse, and assumes a permanent, at most a hardly intermittent, character, often rapidly diminishing when the malady is at its height. The fever which usually abates in the early morning and rapidly rises during the evening, when it often reaches 103° to 105°, is attended by the usual symptoms, *e. g.*, headache, lassitude, languor, furred tongue, thirst, lack of

appetite, and reddish urine. The face has a bluish and puffy appearance, and the patient has some difficulty in lying on the sound side. The cough is, in the beginning, always dry, and attended with constant pain; expectoration comes on later. The number of respirations amounts to forty or fifty a minute. Frequently an eruption is visible at the mouth, and with children and old men inflammation is mostly attended with cerebral affections, delirium and headache, impaired digestion, even vomiting, sometimes bleeding at the nose.

With babies, during the time of suckling, inflammation of the lungs often takes a very rapid and dangerous course, and frequently ends fatally after one or two days; it is quite as perilous in old age, or in the case of drunkards, but may quickly lose its perilous character by a proper timely treatment.

Causes.—Irritation of the pulmonary tissues from catching cold and other unknown injurious influences; even the seasons have a perceptible influence, as inflammation of the lungs happens more frequently during the transition period between winter and spring than at any other time of the year. Breathing a very cold, dry air, with the wind from the west or north, especially after coming out of heated rooms, or after a warm bath, etc.; inhaling impure, dusty, smoky, or very hot air; the entry of foreign substances into the lungs; exposure of the lungs to great irritation; violent passion or mental agitation.

People between the ages of eighteen and thirty-six are mostly liable to inflammation of the lungs. Natural predisposition of the lungs to inflammation, highly stimulating animal food and ardent spirits may also produce it.

The immediate causes which produce the breaking out of the disease are chiefly colds, especially after being previously overheated, cold drinks after dancing, rapid walking or riding, etc. Other causes are, catarrh, rheumatism, cessation of menstruation, stoppage of discharge from piles or of periodical bleeding from the nose, suppressed erysypelas, cutaneous eruptions, gout and lumbago, violent bodily shock, etc.

Men are more frequently attacked by inflammation of the lungs than women, and those who have once suffered from it are always liable to a second attack, even if completely cured.

Treatment.—In the first place complete rest and a comfortable position in bed, avoiding featherbeds if possible. Fresh air, open windows day and night (except when an application, such as a bath, pack, etc., is given), fresh water, non-stimulating food, and enemata for keeping the bowels open and as derivatives. Besides the treatment given below, any other fever treatment may be applied.

In this disease every effort must be made to make the legs perspire, in order to draw the blood away from the lungs. Apply therefore stimulating leg and foot-packs (duration, from an hour to an hour and a half), together with soothing, tepid chest-compresses (75°), covered with flannel and changed, according as the patient's comfort requires it, every half hour to two hours.*) (It is usual to put a hot-water bottle filled with boiling water and with a wet towel or cloth wrapped round it, to the feet.) When the feet are warm, the bottle is to be removed, the feet may be unpacked if the comfort of the patient requires it, rubbed with cool water and placed in a stimulating pack again.

If there be fever, the chest-compresses are wrung out but slightly and applied more thickly (four or six layers thick), and changed repeatedly.

In severe cases instead of the chest-compresses, thick trunk-packs of the same temperature may be given, with cool head-compresses, to be changed frequently, or repeated cool head-lavations.

Tepid, wet rubbing of the whole body (58° to 77°) or, as circumstances require, a bath of 85° is also of great benefit.

When the seat of the inflammation is the apex of the lungs, apply also shoulder-packs or, as the case may be, a Scotch compress.

For Modes of Application, see Index.

SECOND TREATMENT.—A tepid three-quarter pack (73° to 77°), with soothing extra compresses on the region of the lungs. For an adult a large sheet is generally taken, wrung out in water of the above temperature, and folded three times in the part which is placed round the body, the legs being wrapped in the unfolded part. The duration is regulated by the patient's condition, but must not be longer than three-quarters of an hour. A gentle, wet rubbing of the whole body (73°) or a lukewarm bath (88°) is to follow. This treatment is to be repeated as often as necessary. The three-quarter pack may be preceded by a rapid, wet rubbing of the whole body. As this disease occurs so very frequently, two more methods of treatment are given, although the above generally suffices.

THIRD TREATMENT.—Lukewarm bath (88°), after which the patient, without being dried, is put into a soothing full pack, with extra compresses on the region of the lungs until he is thoroughly warm. In most cases a hot-water bottle in wet flannel is to be placed to the feet.

*) I cured a child of mine of incipient inflammation of the lungs in a day and a half. By continually applying stimulating leg packs I drew off the blood, which, as a rule, rushes with increased vigor to the inflamed parts, while I covered the region of the lung with a wet towel moderately wrung out, in order to drive the blood from that place and to allay the pains.
The Author.

Wet rubbing of the whole body on being unpacked, the legs and feet in particular to be rubbed vigorously. Repeat as required.

If pain re-appears in the region of the lungs, soothing chest-compresses may be applied at once, and, if necessary, continued with stimulating leg-packs until the pain is gone.

Fourth Treatment.—In severe cases a table-cloth, for instance, is folded in triangular form and only moderately wrung out in water of 81°, put over the shoulders, chest and spine, and left there as long as the patient's condition permit it (also Scotch compress, *i. e.*, sheet). In addition a towel dipped in cold water and changed every five or ten minutes, is placed on the painful place, upon which the pain will soon diminish; if, however, this should not succeed, a hip-bath is to be taken—a tub or some other vessel is filled two or three inches deep with lukewarm water (86° to 90°), while two or three pails of water are kept in readiness (the first pail to contain water of 84°; the second, water of 79°, and the third, water of 73°). The patient is lifted carefully into the hip-bath, and the contents of the first pail are poured over his chest and shoulders from a jug or watering can, the tablecloth (folded as before) remaining in its place during the affusion.

This process is repeated with the second and then with the third pail. At the same time, two hot-water bottles are placed at the feet, and a wet, cold towel wound turban-fashion round the head, or the latter is kept cool in some other way. One or two persons must, during the affusion, gently rub the back and chest, but apply vigorous friction and kneading to the arms and legs. The affusion is continued till the pain is gone, and the patient is then put into a thick trunk-pack, or full pack, or a steam-bath in bed; if he perspires, he has got over the inflammation, but if the pricking pain returns, the above application must be repeated; the fever will, however, most certainly be conquered within twenty-four hours, provided an experienced natural healer is present. This treatment requires some courage. It should, therefore, be conducted by an experienced man rather than by a non-professional one.

Of the four methods of treatment given above the one must be chosen which is the best adapted to the patient's condition and to his constitution.

LUNGS, TEN PRECEPTS FOR PERSONS SUFFERING FROM DISEASES OF.

Nearly 180,000 deaths from consumption occur annually in Germany alone. It is therefore surely worth while to observe the following ten precepts:

1. Breathe everywhere good, pure air, and avoid bad air.

2. Take frequent exercise, especially in the woods, up mountains, and at the seaside.

3. In the woods, and in general, practise frequently breathing exercises in good, pure air, *i. e.*, take pains to breathe deeply so as to thoroughly cleanse the lungs, even to the very apices, with pure air.

4. Drink frequently milk and good, pure water.

5. Avoid—as much as possible—beer, wine, spirits, in fact all alcoholic drinks, as well as smoking.

6. Wash the whole body every day in a warm room, by preference in rain-water.

7. Avoid all dust and smoke.

8. Breathe through the nose and not through the mouth.

9. Avoid persons suffering from diseases of the lungs.

10. Do not be choleric, but always in good spirits.

Lupus, see "CUTANEOUS DISEASES."

LUPUS, see "HERPES."

LUPUS, CASE OF, CURED BY SOLAR RAYS, A GENUINE NATURAL REMEDY.

By MAX. MEHL, **Specialist for Diseases of the Skin, Berlin.**

Of the many chronic diseases of the skin with which suffering mankind is afflicted, there is none more to be dreaded than lupus vulgaris because up to the present time all the medicines prescribed for it have had no more than a palliative effect. The disease is never really cured, and is liable to cause the most terrible disfigurements of the features and deformities of the limbs.

Having suffered for nearly eight years from lupus on the nose and upper lip, and having in vain sought relief in hospitals and from specialists, I, at last, hit upon the idea of trying the effect of solar rays, by concentrating the latter through a burning glass upon the infiltrated substance, a trick I had practised as a cadet at Potsdam when I wanted to light a forbidden cigarette secretly. The result of this somewhat troublesome operation—an operation which might be attended with considerable danger if unskilfully performed—surpassed my expectations. With the aid of my wife I succeeded in entirely curing the disease, not only on the outer surface, but also on the mucous membrane of the nose. Still dreading a relapse, I waited a year long, and then went to the late illustrious inventor *Werner von Siemens*, requesting him, for the sake of the unhappy sufferers from the disease, to put me in communication with some leading doctor. My desire was gratified; Mr. *von Siemens* introduced me to Professor *Renvers*, who made experiments with my

method with excellent results. Professor *Renvers* also succeeded in winning Dr. *von Leyden* over to my views.

Since that time I have cured many sufferers even from severe forms of lupus. I have successfully treated cases of epithelial cancer, sycosis, lupus, erythemacosus, moles, and warts. On the 6th of November and 4th of December, 1894, I exhibited several lupus patients whom I had cured, before the Magnetic Society of Berlin, in the presence of many doctors and representatives of the Natural Method of Healing. Everybody was struck with the extensive scars left on these patients. Among the patients whom I have cured is Miss *Elizabeth Jacobi*, a young lady from Charlottenburg, who was, at the instance of the home office, received without payment in the Jewish Hospital at Berlin for the purpose of undergoing an operation for the formation of a new nose. After I had removed the remainder of the lupus-tissue by means of the solar rays and the burning glass, Professor *Israel* performed the operation of transplantation (*i. e.*, cutting out a piece of flesh from a healthy part of the body and transplanting it on a diseased part) from the lower part of the arm of the young lady. The operation was so successful that Professor *Israel* exhibited Miss *Jacobi* before the Medical Society.

CASE OF LUPUS CURED.

My wife had suffered for two years from bluish red swellings in the face; her nose looked as though another nose was growing on to it, her cheeks as if they were padded. Being adherents of the Natural Method of Healing, we tried to cure the complaint by means of wet compresses, but without success. Small nodules made their appearance, together with a growth on the right nostril, developing into a suppurating tumor. We consulted Dr. *Fr.*, a natural healer, who did not consider the disorder dangerous, and prescribed derivative steam-baths in bed, packs, abdominal compresses, etc., as well as cool compresses. We carefully followed his directions, but with no result. Water treatment was useless in this case; we then applied to Dr. *Br.*, with no greater success. We now thought it necessary to consult a specialist; the natural healer who first treated the case was also of the opinion that my wife might have to be operated upon, and recommended us to apply to Prof. *S.* who diagnosed the case as one of lupus or syphilis.

Months now passed, and our hopes of an improvement proved illusory; the tumor refused to heal and continued to spread in spite of the remedies of the physicians. My wife observed with terror one day that there was already a small hole through the right nostril. A dry treatment was thereupon substituted for the wet one. One physician found fault with the other; the dry treatment, however, proved useless. Our

dismay was increased when we noticed, after a few more weeks, that a small piece of flesh had disappeared from the right nostril where the tumor was. We were in despair, for, in spite of all the trouble and expense, the disease continued to spread and there seemed now every prospect that my wife's nose and cheeks would be destroyed.

In our trouble we were one day advised by Mr. ***Bartsch***, whom we had asked for advice, to apply to Mr. ***Mehl*** of Berlin, the discoverer of the method of treatment by solar rays.*) The latter also diagnosed the case as one of lupus, and at once commenced his treatment. No time was to be lost, as in a few more weeks the disease would have attacked the eye.

The treatment did not consist in the administration of drugs. The disease was cured solely by means of solar rays and the burning glass. This method of treatment was discovered by Mr. ***Mehl*** who tested its efficacy on himself after all medical aid had proved fruitless, and may be claimed as forming a part of the Natural Method of Healing, as it virtually consists in aiding nature. After a three months' course Mr. ***Mehl*** succeeded in completely removing the disease, and saving my wife's face and nose which are now in their normal condition.

The treatment is somewhat painful, but there can be no doubt as to its efficacy. We witnessed several other cures of this terrible disease.

Sonnenburg, Neumark. *A. Sensfuss.*

Lymph, see "VACCINATION."

LYMPHATIC GLANDS, SWELLING AND INFLAMMATION OF THE, frequently arises from slight causes, but it is sometimes the result of more deeply seated diseases. It is found principally on those parts of the body where masses of the glands come together, *e. g.*, on the throat and neck, the armpits, the groins, the abdominal and thoracic cavities. The swelling is brought about by some mechanical irritation, pressure, or distension, but more particularly when any considerable affection exists within the sphere of lymphatic vessels receiving a gland of this kind. The swelling is generally painless and is of the size of a pea or bean, soft and movable, but, as a rule, gets harder and larger afterward.

It frequently passes into inflammation, suppuration, and disintegration. The so-called scrofulous abscesses are met with in diseases, such as scrofula, syphilis, and cancer.

TREATMENT.—For the former cases, a steam-bath, or steam-bath in bed, daily, followed by a bath.

When there is inflammation with the swelling, soothing compresses also should be put on the affected parts.

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*) A pamphlet on this treatment, with a preface by Dr. *Boehm*, can be procured from *Fr. Hofmeister*, Leipsic.

An abdominal compress and leg-pack at night, early in the morning a bath (86° to 90°) or wet rubbing of the whole body (77° to 81°), fresh air, and vegetarian or mixed diet, according to the patient's health. Massage, in the form of pressing and stroking the swollen glands as well as of the whole body. In the second case (when the swelling is an attendant symptom of one of the above-named diseases), a suitable treatment should be applied.

Report of cure, see under "SCROFULA."

See also "TONSILS, INFLAMMATION OF THE." For Modes of Application, see Index.

M.

Macaroni, see Index.

MACERATION. Many varieties of this are met with in the system. They may be described as abnormal changes in the body which affect the functions, composition, and position of the organs.

TREATMENT.—Strengthening treatment.

MAGNETISM (History). All nations of ancient and modern times, both savage and civilized, have been familiar with the soothing and healing effects of "laying-on of hands" (magnetization). In early ages the fact was recognized that this soothing and healing power was not possessed by all hands in the same degree, and the men who exercised the most potent influence in this respect were honored as the ministers of good and evil deities. In the Bible as well as in many other scientific writings of antiquity (Pliny) we find frequent accounts of the above method of healing, the efficacy of which would seem to be greatly increased by intense faith, on the one hand in the divine mission, on the other in the healer himself. They are, in fact, spiritual forces, with which we are here concerned, and it was not till the end of the last century that an exact investigation into these matters commenced. So long as the tendency of the age was religious, the study and recognition of this healing influence was fairly common even in rigorously scientific circles. The wonderful cures effected by the Irish officer *Greatrakes*, about 1650, and by the Suabian ex-monk *Gassner*, excited much attention, but they were looked upon by most of the people of that time as miracles only. The physician *Frederick Anton Mesmer* (1734 to 1815) was the first who again made these matters prominent objects of scientific interest. This inquirer met with strong opposition in Vienna, but became enormously popular in Paris, and, the other physicians taking the matter up, the French Government was forced to appoint a Commission of Inquiry in 1784, and in consequence of their unfavorable report the method of healing by

"laying-on of hands or passes" was forbidden to the medical profession. The adherents to the system continued their work in secret, but nothing of it came before the public till 1815, the year of *Mesmer's* death. In that year many experiments were made in Paris and Berlin, with the object not only of curing diseases, but of producing beneficial and restoring sleep. The University of Berlin had previously established a chair of animal magnetism, and pages might be filled with the names of scholars pursuing that study. Specially known are, *Wohlfahrt* (who set up a magnetic establishment and labored for the introduction of the magnetic treatment in the Berlin hospitals), *Nees von Esenbeck, Hufeland, Ennemoser;* Professors *Kieser, Eschenmayer*, and *Nasse* edited (1817 to 1823) the "Archives of Animal Magnetism" in twelve volumes. The Paris Academy appointed eleven doctors to examine the matter, who in 1831, after an inquiry lasting five years, declared unanimously in favor of the existence of animal magnetism, though they did so with great reserve. In the course of their experiments, persons were placed before a door, behind which, without their knowledge, the magnetists were operating; a conversation was started to divert their attention, but in spite of this, they felt the magnetic influence, or were speedily put to sleep. The chair for animal magnetism was, however, abolished when materialism came into fashion.

Renewed investigations on this subject were made by Dr. *Karl v. Reichenbach* from 1841 till his death. He would shut up people in a dark room, and when their eyes had got extremely sensitive to the smallest stimulus of light, in consequence of several hours' stay in the dark, he would ask them what they perceived on bodies, magnets, etc.; about fifty or sixty per cent., nearly five hundred people, replied that they saw colored rays proceeding from them. *Reichenbach's* chief work is "Sensitive Man," the fruit of ten years' labor, containing the fullest information of *Mesmer's* hypotheses, and the basis of magnetic operations. *Reichenbach* applied the term "Odic" to the visible and sensible emanations, an allusion to the name of the Scandinavian deity "Odin," the ruler of the world.

Now, at the close of a century of "exact science," after much close and careful inquiry into the existence of a "magnetic" force, the saying of *Schopenhauer* is amply justified. "The man who nowadays doubts the power of magnetism, must be styled not incredulous, but ignorant."

A number of distinguished physicians, as Dr. *Lutze* (Cöthen), Dr. *v. Stuckrad* (Berlin), Dr. *v. Nussbaum* (Munich), and others have declared themselves decisively in favor of magnetism.

Dr. *v. Nussbaum* gave the following opinion when called upon to give evidence in a lawsuit:

"An animal magnetism of such power that results can be obtained merely by contact with the hands or magnetized water, exists to a certainty. The study of animal magnetism has hitherto been left in the hands of men of small scientific knowledge, and, as a consequence, it has almost exclusively been exploited by unprofessional men for their own pecuniary benefit, as a species of conjuring. Therefore the opinions of forensic physicians should be given with the utmost caution.

"I will now endeavor to explain a little more fully the three assertions that I have made.

"1) Certain men exercise a very soothing influence on each other; with others this influence is exactly the reverse.

"Little children will not fall asleep equally readily in the arms of everybody.

"I know some educated ladies who simply cannot get their hair dressed by a dark-haired maid, for the hair actually follows the dresser's finger tips and stands on end like bristles, whereas it can easily be brushed smooth by a fair-haired maid.

"Many similar cases of relative influence are met with, but it has yet to be discovered how this influence can be utilized in the treatment of disease.

"2) Learned physicians have hitherto occupied themselves but little with magnetism, finding it more convenient to decry it as an imposture; truth, however, will always make its way, and though these wonderful forces are still in the hands of amateurs, it will be impossible to ignore them much longer.

"Doctors are actuated by a selfish fear of forfeiting their reputation and being classed with swindlers.

"3) As no lectures are held on magnetism at any university as yet, there is little opportunity for studying the subject, and that is the reason why forensic physicians are very cautious in expressing an opinion on it. Most of them admit the probability that we possess a great force in animal magnetism, which will doubtless one day develop into an effective remedy, but of which too little is known at present, since everybody has little more than his own limited experience to go by.

"At present the subject seems to me to be in this position: We can neither accuse those of ignorance who do not believe in the marvels of magnetism, nor can we accuse their antagonists who credit magnetism with powers hitherto unknown, with exaggeration or imposture."

v. Nussbaum.

We omit some matter of mainly scientific interest, which has appeared in previous editions, together with some theories and opinions of

men of science, in the belief that well-certified cases of healing will be enough to convince the patient of the healing properties of magnetism. These cures (the genuineness of which has been examined and testified to by legal authorities), effected by celebrated magnetopaths, such as *Kramer*,*) *Tormin, Schröder, Reichel, Ressel, Blechniger,* etc., are subjoined under the headings of the several diseases.

According to Professor *Hofrichter* the means which the unprofessional magnetizer may employ to attain his object are:

1) The position;
2) The touch with the hand;
3) The word;
4) The breath;
5) The look.

1) The Proper Relative Position.

People in general have not the remotest idea of the power of the magnetizer to influence the patient by the right position and posture, in which he places him. The position with regard to the points of the compass, a comfortable easy-chair or bed, an apparently undesigned conversation, walking leisurely in circles round the patient, suffice frequently to soothe him, though he be of a most excitable temperament. All the impressions made in this respect must give the impression of being purely accidental, and they will then obtain the most striking results.

2) The Touch with the Hand.

The use of the hands, as the visible agents of odic-biomagnetic influence, occupies the first and foremost place in the armory of the unprofessional magnetizer. On the application of the hands and their relative position to the several parts of the patient's body depends the desired effect; the manipulator's hand and its movements express his mode of action. It will consequently have a definite exciting or soothing effect. Though, according to *Mesmer*, the direct contact of the magnetizer's hand with the diseased part is not necessary, still it is indispensable, in my opinion, when an amateur mesmerizer treats the patient, for the latter does not only want to see, but to feel something. The treatment is applied with one or both hands, with one or several fingers. It has long been known that in certain circumstances the touch with the hand is insufficient, whereas placing a healthy body against a diseased one (especially

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*) The first place in our thoughts belongs by right to the venerable Nestor of contemporary magnetopathy, *Ph. W. Kramer*, of Cologne, to whose wonderful cures the fact must be ascribed that magnetism has again found consideration and growing recognition in wider circles. At the age of eighty-three he is still working and healing. As an author, also, he has done valuable service in the good cause.

with mother and child) effects marvelous results,—re-animation of asphyxiated persons, cure of lock-jaw (tetanus), etc.

3) The Word.

The spoken word may, with a skillful magnetizer who possesses a strong will, often supply the place of manipulations. The charm which lies in the words of a beloved person, the involuntary attraction exercised by the voices of young children, the elevating happy influence of a conversation carried on in a calm and sustained manner, the sympathic, benevolent way in which the symptoms of a disease are explained and their import smoothed down, all these facts give the experienced practitioner ample means, with which to introduce and to end the treatment by odic influence.

4) The Breath.

This peculiar something, which radiates from our whole body and exercises a surprisingly stimulating influence on the nerves of sensitive people, must not be confounded with the breathing and blowing on painful wounds or sensitive places. In this manner the breath may be utilized with great benefit in magnetizing water and other mediums of magnetism. Breathing has an excellent effect in cases of tetanus, in convulsions, but more particularly in all painful diseases.

5) The Look.

In the human eye lies a peculiar expression of the will capable of influencing the sensitive cerebral parts of a patient.

We meet in life with numerous instances of people entirely unknown to each other becoming quite intoxicated under the irresistible influence of the eye. The so-called "evil eye," well known in popular parlance, is a case in point. The eye is pre-eminently calculated to produce somnolency. If it be required to act soothingly on a patient, his left eye is looked at with the magnetizer's right and *vice versa;* if, however, his nervous system wants stimulating (*e. g.*, to produce critical turning points in the disease), the manipulator must look with his left eye at the patient's right and left eye by turns. The look seems to be the most effective link of communication between brain and brain, and, on that account, often produces the most marvelous effects even when the magnetizer is a considerable distance away from the patient.

The treatment will, in many cases, require the application of certain intermediate bodies or conductors of magnetism. Experience has shown that some substances, especially water, glass, silk, cotton-wool, paper, crystal, and charcoal are capable of absorbing and transmitting magnetism. Animal magnetism can, in fact, be evoked and transmitted, similarly to sound, light, heat, and terrestial magnetism.

Magnetized Water.

I will now describe the process of magnetizing water, necessary to the amateur magnetizer for the treatment of diseases, and recommend its application simultaneously with that of the more direct magnetic operations.

Common water will acquire positive magnetic properties when magnetized with the right hand, negative when manipulated with the left. Woman, as the representative of the opposite—the negative—principle, produces positive magnetism with her left, and negative magnetism with her right hand. The operation of magnetizing is performed in the first case by placing the right hand against the bottom of a vessel, glass, jug, or pail, filled with water to the top, or against the side if the vessel be large, whilst the left hand is held over the water at a distance of two inches, with pointed fingers which, after the lapse of a minute, are extended, the whole flat hand being held horizontally over the surface. The hand is then raised to a distance of about eight inches, the fingers are again pointed and lowered toward the water once more. The operation is repeated and lasts from three to five minutes at the most. This process is also called "charging the water with magnetism."

If positive water be required, the left hand rests against the bottom or the side of the vessel, the right hand is held pointed in the manner described, and the same process is gone through.

The striking effect, produced by water thus prepared, may be seen in the characteristic changes which the impaired system undergoes. The water, which a man has magnetized negatively, is applied with very surprising results in the most obstinate and inveterate cases of constipation. Water magnetized positively (with the right hand), is the most excellent remedy for diarrhœa, being especially efficacious with young children, when given in doses of a teaspoonful every hour. Magnetic water playing such a very prominent part in the therapy of magnetism, the warning must be raised,—be sure not to apply it in large quantities or in a too rapid succession!

And here I must earnestly caution against too frequent applications of magnetism. In my opinion, an interval should invariably follow any operation, as soon as, at least, a partial result—such as is intended—has been obtained, and only then should the treatment be proceeded with. If possible, however, a slight alteration in the manner of treatment should be made, so as not to accustom the patient's system to a too uniform manipulation.

Magnetized water is administered internally to adults in cases of constipation or diarrhœa, in doses of two, at most three, large spoonfuls,

morning, noon, and evening. In the treatment of children, of course, one large spoonful will amply suffice. In cases of dropsy, rheumatism, and fever, the patient may drink as much of the water as he wants to. The question whether positively or negatively magnetized water is to be applied depends, in all cases, upon whether the tendency of the patient's bowels is toward constipation or diarrhœa.

A second excellent agent for the transmission of the magnetic fluid is cotton-wool. The most suitable for this purpose is the glazed variety, since perspiration makes any other useless in a very short time. It is used for curative purposes, by holding up about the fourth part of a large sheet or square of it, like a sheet of paper, and whilst the eye glances in a sweep from left to right, adding the other layers, one by one, and breathing upon them in succession, beginning always at the left side and with the mouth at a distance of about an inch away from it. This process is repeated about twice on each side. The cotton-wool (or wadding) is then enclosed in clean paper, divided into smaller pieces if required, and—like magnetized water—kept in some dark place. Through the agency of cotton-wool the amateur manipulator will be enabled to obtain most striking results. The treatment of diseases not only aims, as is known, at the removal of their causes and the restriction of their course, but consists also in local applications, which, as in neuralgia, febrile and inflammatory conditions, prove efficacious in soothing nervous pains that have frequently become intolerable. In the absence of the magnetizer the patient uses for this purpose pieces of the cotton-wool thus prepared, taking it out of its enclosure himself—the touch of a third person of this magnetic conductor does not conduce to the patient's benefit—and applying it lightly to the affected part. Though a momentary increase of pain may set in sometimes, it nevertheless yields in about two or three minutes, and frequently disappears altogether for a shorter or longer period.

The application of magnetic or magnetized cotton-wool—the amateur practitioner must bear well in mind—is never to exceed five minutes. But its employment affords genuine relief to the patient and is indispensable in cases where he cannot obtain direct magnetic influence. By laying on cotton-wool, it is possible to considerably relieve pains often absolutely intolerable, *e. g.*, in violent neuralgia, and more particularly in sciatica.

The Application of Magnetized Charcoal.

Besides the unbearable pains, which attend a severe disease, the loss of strength caused by insufficient nutrition plays a most important part. How often do we not hear a doctor exclaim: "Yes, if the patient

could only sleep!" This important symptom—loss of strength—characteristically indicating with the majority of patients the initial stage of collapse, gives rise to the wish to be able to sleep. Nothing is more fitted to satisfy this desire than the use of magnetized charcoal. Oblong pieces of it—charcoal of birch wood is the best—are cut for this purpose about six inches long by two and a half broad. These pieces of charcoal are held by the magnetizer at both ends, breathed upon on all four sides from left to right, then wrapped in tissue paper and kept in a dark place, till made use of. If it be desired to procure some sleep for a weary patient, the latter takes a piece of charcoal into each hand at the time when normal sleep generally comes on. A third person must, of course, never remove the coal from its covering, nor perform operations with it. The patient retains the pieces of charcoal in his hands for about five, at the most seven minutes. In about two minutes, as a rule, a kind of quivering sensation is felt in the arms, as though some fluid were coursing through them, accompanied by general shivering and occasionally by tremor and perspiration. Then a pleasant sensation of general lassitude comes on, during which the eyelids close either slowly or suddenly, and this is followed by a normal, strengthening sleep. When the eyes close, the hands become, after a lapse of five to eight minutes, so passive that the patient is unable to raise them again.

The pieces of charcoal must then be taken out of his hands by a third person, put in paper and taken care of. The sleep into which the patient then enters is by no means a natural one, but is the result of that peculiar check exercised on the brain, synonymous with cessation (stoppage) of the brain's activity, closely related to the suspension of function of single nerve centres. All the patient's senses appear sharpened in magnetic sleep, but perfect tranquillity possesses him, and he is sensible of it. After about from half an hour to an hour this condition changes to one of real normal sleep, in which the remenbrance of events and the sense of hearing vanish. The application of mangnetic charcoal must, in my opinion, never exceed ten minutes, because otherwise the patient will complain all next day of a feeling of tiredness in his limbs and show a disposition to fall into a magnetic sleep again. 'In this case also, one can have too much of a good thing.

Those who unfortunately suffer from epileptic fits and St. Vitus's dance, and live in continual dread lest they be attacked by the disease at school, at church, in the theatre or in company, will find in the expedient of carrying magnetized charcoal,—one piece in the left trousers' or side-pocket, the other in the right—an excellent means of checking or materially mitigating those fits, often terrible and most

painful at the same time for other people to witness. The application of magnetized charcoal and a little draught of magnetized water, in cases of epileptic persons with symptoms of tetanus, produces immediate restoration of the functions of their senses, whose action would otherwise have remained suspended for hours.

With regard to the application of glass as a magnetic conductor, it is particularly efficacious in diseases of the heart. Most surprising is the effect of the pieces of glass, about three inches in length by two inches in width, with a hole through the centre of the upper end, applied to persons affected with angina pectoris, valvular defects, or cardial paralysis. For this purpose a small piece of glass*) is hung round the neck by a strong woolen string, long enough to allow the glass to rest on the heart; three to five minutes at the outside suffice to stop the attack.

Oil (of the best quality) is magnetized for healing purposes, by pouring it into a shallow saucer and breathing on it for about three to four minutes. In cases of induration, or painful tumors, it is poured by the hand of a healthy person cautiously on the affected part; a still better plan is to pour it on cotton-wool and dab the place with it. In performing this operation, the movement must be always circular. When the patient is very sensitive, it is expedient to warm the oil a little.

Magnetized Baths.

Magnetic baths exercise an extremely far-reaching effect on the whole system. The author of this article has witnessed the most astounding results in spinal disease, secondary syphilis, or suppression of the activity of the skin, in scrofulosis, decomposition of the humors of the body; and finding nowhere a description of the magnetic treatment for these diseases, I give one here on the strength of many years' experience.

For a patient who has already been treated with magnetism, and for whom more vigorous applications of life magnetism are demanded, it is recommended to prepare the bath as follows:

A wooden tub or bath is filled with water to about two-thirds, the temperature being from 88° to 92°. It is advisable (especially in private bedrooms) to choose the position for the bath, so as to have the head pointing to the north and the foot to the south. The water is then magnetized in the same way as that for drinking and gargling purposes. To this end the upper arms are bared as far as the shoulders, and—to have everything comfortable—a cushion is placed at each side of the bath. Longitudinal passes are made from the head of the bath to the foot of it, at about one inch distance from the water, with the flat hand in

*) Glass is made magnetic by being rubbed with both hands till it gets warm, and by breathing upon it afterwards from the left to the right.

such a way that the manipulator, kneeling at the left side, moves his right spread-out hand over the water of the right side of the bath and then going to the right of the bath, performs the same pass with his left hand also over the right side of the water, as far as the foot end, thus producing negative magnetization. This process must be repeated from five to seven times. Highly sensitive people feel, when holding the bare leg over the water, a nerve-current passing through it, as if the magnetizer's hand, being held over the place, were slowly passing down it. Then the patient gets into the bath, his best position at first being, to sit in it and to assume gradually a recumbent position. Should his pulse increase,, it is necessary for him, if it is his first bath, to get out of it after five or at the most eight minutes. Nor should a magnetic bath ever last longer than from twelve to fifteen minutes, as after an excitement of the whole body a general relaxation of the nerves takes place.

I have frequently observed signs of magnetic sleep appearing during the magnetic bath. With persons, therefore, who suffer from insomnia, and who are accessible to treatment by magnetism, the last and very frequently the only recourse, when all previous attempts to produce sleep have failed, is the magnetic bath. In the same way I have often had the opportunity of noticing in cases where the sexual parts were greatly relaxed, in consequence of self-abuse, a striking reanimation and increased sexual desire after the magnetic bath, both in old and young.

MAGNETIC TREATMENT (Introduction). Animal magnetism, vital force, pervades every organism. Man possesses centres whence magnetism radiates in all directions. The right side of the body, more especially the finger tips of the right hand and the right half of the brain, shows, when observed in a dark room by so-called "sensitive" people (about fifty or sixty per cent.), a bluish, the left side a yellowish radiation. The upper part of the body shows a preponderance of bluish, the lower part of yellowish rays. In sickness, the yellow rays are far in excess of the blue. In the treatment of disease the aim is to restore the equilibrium of these emanations or rays. The morbid emanations are considerably reduced after one magnetic operation.

During the operation the patient feels a pleasant sensation of warmth or a refreshing coolness, and this is succeeded by a disinclination for mental work and a desire for sleep, such as is met with in healthy and well-developed children, and the gratification of which is of great advantage in the treatment. The rapidity with which the desired result is obtained is proportionate to the patient's degree of sensitiveness to magnetic influence. Very sensitive subjects are sometimes cured of severe ailments in a single or at most a few sittings. As a rule, however, a longer and

more persistent treatment is required, and in general the course will consist of from seven to fourteen operations. Magnetic treatment is adapted for every period of life, for the new-born child as well as for the old man, and for both sexes. The treatment is frequently aided by the use of magnetized water, which may be considered as a universal remedy, and can be administered internally or in the form of compresses for sores, wounds, inflammation, rheumatism in the joints. Magnetism is suitable in all internal and external diseases except such as are absolutely incurable or require a surgical operation.

In severe and pronounced cases it is always advisable, when possible, to secure the services of a good professional magnetizer. In this way the treatment will be shortened and the expense saved, and a more radical cure may be expected, since the professional man has probably selected his calling on account of his greater capacity for exerting magnetic influence, a capacity strengthened by daily practice, and can give the benefit of greater knowledge and experience.

Every magnetizer combines the strokes and passes described above in a manner which appears to him most suited for each individual case. The chief points he has to attend to are: 1) polarity, 2) the direction in which the nerves lie, 3) to avoid overcharging by making more than about twenty passes over the same spot, 4) to be careful not to make the passes in the direction of his own body.

The treatment should be applied by a person of sympathetic temperament, and in as calm and collected a manner as possible. Duration of a sitting from five to twenty minutes. The sittings should take place daily or from twice to four times a week, sometimes twice or three times a day, but only in severe cases; all excess is to be avoided. Excessive loss of magnetic force through transmission to the patient when his own supply is limited is harmful to the operator; the practised magnetopath must not feel fatigued after a few operations.

Magnetizing, employed as a healing agent, thus means transmitting some of the superabundance of vital force of one man to another man who is in want of it, and in this way helping him. The magnetizer radiates the vital essence in the form of nerve fluid: he evaporates it (as Dr. *Gustav Jaeger* calls it in his work "The Discovery of the Soul") and the patient's morbidly affected cells*) eagerly absorb it, provided always, that there exists an affinity between the magnetizer and his patient.

In other words, there must exist a thorough reciprocal sympathetic relation between the operator and the person operated upon, if magnetic influence is to be permanently successful. But further, only a magnetizer

*) The whole human body is constructed out of an infinity of cells.

who is morally pure and in perfect harmony with himself can produce pure magnetism and restore the disturbed harmony of body and soul in his patient, for the immoral man does not live in peace and harmony with himself, and he impresses, as it were, his own immoral character upon the magnetism generated by him.

How true, therefore, are the words of ***Justinus Kerner*** in his work, "The Seer of Prevorst": "Let no one, for heaven's sake, stretch out his hand here (as magnetizer) in whose heart does not dwell religion and solemn earnestness!"

Passavant's words are worth earnestly taking to heart: "But it is on the mental condition of the magnetizer and his patient that magnetic influence most essentially depends. Passions of any kind—fear, grief, sadness, absence of mind—paralyze or destroy the magnetic relation. Those, as a rule, will most readily receive the beneficent influence of the healing power who are without preconceived opinions and yield to it in simplicity. The effect is, therefore, in most cases greater on children and uncultured people than on persons in higher stations of life, who frequently have some kind of knowledge of magnetism, and have misgivings about somnambulism, which they falsely look upon as a ***necessary*** consequence of magnetic influence, thus disturbing the rapport relation by a perverse reaction." ***Passavant*** says further: "This force has been misused often enough, as has every human force, and the loftier the force, the deadlier has been its misuse. But appeal to the testimony of history, ask all the generations of the earth whose bones form the soil on which we walk: Has there ever appeared in the world a great and glorious phenomenon, even the hand of the Eternal God visibly touching the earth, which was not derided by the shallow-minded, distorted by superstition, cankered by the worm of mockery, and tainted, abused and poisoned by the dark spirit of falsehood? ***But is it the water's fault if the lily draws its fragrance, and the hemlock its poison from it?***"

In all cases of diseases we have to regard the whole body as a system of forces (storehouse of force), hence general treatment for the whole body is to be preferred. The operator places himself opposite the patient, the latter either standing, or, which is better, sitting or lying down, and makes passes with his hands down the whole body at a distance of one or more inches from the surface. If he stands behind the patient, the hands must be crossed in making passes along the back, which must also be made from above downward. A pass must never be made in the reverse direction, therefore a wide sweep must be described in bringing the hands again to the top.

In making the passes, the fingers must be held loosely, and a little spread out and bent, as if it were intended to glide the finger tips over

the surface of the body. At certain points pauses are made in these passes, which are to be performed almost entirely without touching the patient. The places for these pauses vary according to the nature of the complaint, *e. g.*, in diseases of the stomach and abdomen, the finger

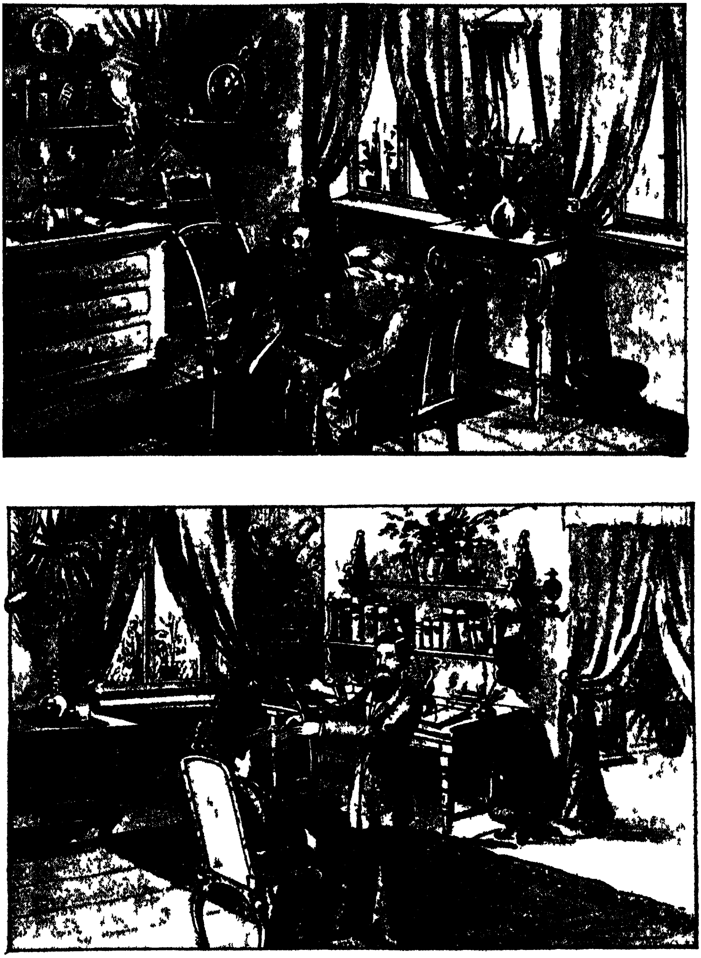


Fig 231

tips are first lightly laid on the front portion of the head and allowed to rest there a little; then the hands are slightly raised and the pass made as far as the closed eyes, when another pause is made at the root of the nose and the corners of the eyes. Then the pass is resumed, and further pauses made over the stomach, sexual organs, knee joints and

feet. When making the passes down the back the pauses are made at the nape of the neck, the loins and the calves. In diseases of the blood, spasms of the heart, unless complicated by sexual disorders, the pauses are made over the heart, spleen, liver and kidneys. In disorders of the lymphatic ducts, and their ganglia, pauses are specially made over the latter—the so-called glands—also behind the ears, under the chin, below the clavicle, the armpits and over the groin. Organs situated on the left side are treated with the right hand and vice versa. These pauses in the passes are also advantageous when the operation is performed with the hands touching the body. The passes are of course also made over the ears, arms and shoulders and elbow-joints; but the operator must be careful to alternate the direction of the passes, and to see that the conclusion of the passes be made gently but decidedly in the direction of the pass outward away from the body, so that no suffusion of the current may take place.—For this reason the passes with pauses are inserted between those that are evenly distributed. They must never come at the end of a sitting.

Direct manual treatment, in which the right hand of the magnetizer is placed upon the diseased spot on the patient's left side and vice versa, is beneficial but not so efficacious as the treatment with passes. Instead of placing the hand on the patient, it can be held at a short distance, or the finger tips can be made to approach the body for a little while, and then gently withdrawn in the direction of the pass as if scraping out the disease. An earnest desire to heal, and a calm, dignified and confident manner of carrying out the operations, are important auxiliaries in the treatment.

MAGNETIC TREATMENT OF DISEASES IN ALPHABETICAL ORDER.

Magnetism. (Abdominal Complaints.) TREATMENT.—The hands should be placed lightly on the abdomen (right hand on left side and vice versa) and held there for from five to ten minutes.

For twelve years I had suffered from disease in the abdomen. Three years ago I underwent an operation from Prof. *Bardenheuer* in Cologne. The right ovary was removed. I remained, however, seriously ill. Three months ago the doctor informed me that as I was suffering without intermission from hemorrhage and severe pains, I must go through a second and more severe operation. Not only the left ovary, but the entire uterus had to be cut out, and no secret was made of the fact that the operation would be dangerous to my life. As I was in a very feeble condition in consequence of my long illness, I was convinced that I should not be able to stand such a severe operation. I then con-

sulted a magnetopath. He laid his hands on me, and the hemorrhage at once ceased for a week. After a second sitting, fourteen days afterward, the hemorrhage was suspended for a fortnight. After five more sittings, in the course of five weeks, the malady had disappeared; I had no more pain, and the menses were regular again. After the lapse of three months I again called on Prof. *Bardenheuer* on September 24th. He had me examined by one of his assistants in his presence and declared me completely cured. The operation had become unnecessary. I then informed the professor that I had been magnetized and that I owed my recovery to the magnetopath. In my own and my husband's name I here express my warmest thanks to this gentleman for my recovery which deserves special notice in scientific circles.

Mühlheim on the Rhine. Mrs. *Agnes Dünner*,
Deutzer Str. 50.

I had suffered for a year from an abdominal complaint, which had got gradually worse. This year, in June, I became bedridden, after I had been treated for three weeks in a lying-in hospital. The doctors there told me that if my illness did not take a turn for the better I should have to undergo an operation. I then applied to Dr. *Weidemann*, who also declared that I was suffering from an internal tumor and would have to undergo an operation in the hospital. Instead of following his advice, I put myself under magnetic treatment. Even after the first sittings a striking and wonderful improvement set in. After fourteen sittings I have been able to-day to see Dr. *Weidemann*, who considered the disease cured and expressed his astonishment at this remarkable change. He said it was fortunate for me that I had not gone through the operation. For the sake of my suffering sisters I here publicly express my heartfelt thanks for this cure and am prepared to give further information verbally about the case.

Cologne, Sept. 30, 1896. Mrs. *Josephine Regh*.

Having suffered for a long time from a complaint in the abdomen, I had myself examined by Prof. *Kruckenberg*, in Bonn, on April 15, 1896, who declared that I was suffering from a growth which was increasing in size at an alarming rate and could only be removed by an operation. A specialist for female diseases told me the same thing. So I had a dismal future before me. Last year, however, I heard of the successful cures effected by a magnetizer and sought the aid of his treatment with entire confidence. To my great delight I am now completely restored after from thirty to thirty-five sittings, a fact which has been medically attested.

I feel compelled to express my hearty thanks to this gentleman, hoping that it may often be granted to him to cure cases like mine and restore happiness to the suffering.

Duisburg, March 6, 1898. Mrs. *Karl Seib.*

Mr. *W. R.*, Magnetopathist, 34 Marschallstrasse, Dresden, cured me in a short time of a severe abdominal complaint from which I had been suffering for years. I can heartily recommend Mr. *R.* and shall be glad to give further information.

I again express my warmest thanks to Mr. *R.*

Dresden, Sept., 1897. Mrs. *M. Mucke*,
Blasewitzer Strasse 36.

It gives me great pleasure to certify that I have been cured of my illness by magnetic treatment. I had been suffering for seven years from a complaint in the abdomen, had been in the hands of many doctors, and endured the most terrible pain, without experiencing any improvement. Then I underwent an operation and afterward suffered agonies in the upper part of my body; if I attempted to do the least thing, I felt terrible pains in the chest, back, heart, and stomach. I was examined by various doctors, who declared that my complaint was nervous debility and that I only wanted rest. I slept very badly at night, with unpleasant dreams; on waking I was frequently seized with a terrible palpitation of the heart, so that I had to get up and was so frightened that I did not know what to do. On rising in the morning, I felt such pain in my whole body that I scarcely ventured to move.

I described my symptoms to a magnetizer of whom I had heard, and he informed me, after examination, that I was suffering from severe internal disease and that my heart, lungs, stomach, liver and kidneys were affected and the cause of my pains. I put myself under his treatment, and noticed at the first sitting that my pains had diminished. They gradually vanished with the treatment—and I have now got rid of all my troubles and enjoy refreshing sleep at night.

Berlin. Mrs. *Ida Steinberg,* Prenzlauer Strasse.

I had suffered greatly for fifteen years. The doctors had declared my trouble to be anæmia and abdominal disorder; I had for years to undergo treatment, but was never completely cured. I particularly suffered from violent pains in the back and abdomen, combined with great excitability and general weakness and exhaustion, so that I was incapable of walking, standing or going into social gatherings for any length of time. Almost every week or fortnight I had severe headaches mostly

accompanied with sickness and latterly with fainting fits and cramp in the neck. Painting and rubbing with iodine, as well as visits to watering places, relieved me for a time but did not cure me, so that for some years I had ceased to consult doctors, had become resigned to my fate and had given up the hope of complete recovery. But Heaven had mercy on me and sent me the help I had vainly sought, in the magnetopathist, Mr. *W. R.*, through whose beneficent treatment I have become another being. Mr. *R.* pronounced my disease to be lymphatic affection, on account of a thickening of lymph boils which had formed in my body. Mr. *R.* has magnetized me for a long time, and by simplifying my way of living and by careful attention to the skin, has purified the blood, removed the pains and saved my life. I have had no pains for many weeks, the headaches having at once yielded to the treatment.

I acquired confidence in this treatment through this rapid cure of an attack of phlebitis, which Mr. *R.* had performed without medicine. The year before I suffered from the same illness, and spent six weeks in bed in great pain under medical treatment. After the successful result in my case I can only recommend sufferers to adopt Mr. *R.'s* treatment with entire confidence. *Charlotte Thalwitzer,*

Berlin. Weissenburger Str. No. 55.

Four years ago when my wife had left her bed after a tedious confinement, during which she had a great deal of suffering, she complained of pains in the back, and a difficulty in walking. These troubles were ascribed by the physicians who treated her to the great loss of blood and consequent weakness. The pains, however, as well as the difficulty in walking increased, till finally my wife was unable either to walk a step without assistance or to raise her legs by herself. Moreover, entire loss of sensation in the legs was added to her other symptoms. All the efforts of doctors and specialists as well as a several weeks' treatment at the Marienbad in Düsseldorf were fruitless. This sad state of things, together with the continually increasing pain, often caused my wife to wish for death. The conviction forced itself upon me that this condition of my wife would soon pass into total paralysis. Last March I happened to hear of the remarkable cures effected by magnetopathist *T.* in Düsseldorf, and although I had at that time but little confidence in this system of treatment, still in view of the complete failure of the treatment my wife had hitherto had, I considered it my duty to send for Mr. *T.* for a consultation. After Mr. *T.* had treated my wife twice as an experiment, he expressed his conviction, on the strength of the improvement already visible in her condition, that he could cure her. I, therefore, took my wife to Düsseldorf, where she first went through a month's

course of treatment, followed, after an interval of two months, by a fortnight's course.

From the beginning of the treatment the intolerable pains in the back diminished in intensity, and in a few days my wife was gratified to find that she could walk across her room without assistance, though slowly and with caution. To-day my wife can climb up stairs and walk about the town.

In giving you this testimonial, I thank you again for the pains you have taken in the treatment of my wife, for none of us who knew her condition would have thought such a result in so short a time possible, I and my family thank you again and assure you we shall always be ready publicly to vouch for the truth of the foregoing.

Gladbach. *Herm. Robeck.*

My daughter *Anna,* now in her eighteenth year, had been confined to her bed for three years owing to a serious illness. She could neither stand nor sit upright in her bed. Her legs appeared to be dead and were insensible to the prick of a needle. Nine doctors, after repeatedly examining her, had declared her incurable. The diagnosis was to the effect that the patient suffered from an abdominal complaint, a tumor and paralysis of the intestines. Dr. *Groos* went so far as to advise my husband not to go to any further expense, as no doctor in the world could help her. Motions of the bowels could only be procured by means of an enema which a Sister of Mercy regularly administered to her. On every such occasion the patient, who had to be held by two persons, suffered terrible pain. In the same way the passing of urine could only be effected by means of warm vapor applications. Two doctors decided in favor of an operation, others, however, feared that the patient would die under it. After three long years of pain and constant medical treatment, her condition was as hopeless as before. And now, as a last resource, we turned to magnetism. Mr. *T.*, a magnetopathist, visited the sufferer. Immediately an astonishing improvement set in. After treatment the evacuations were normal and painless—the insensibility and paralysis had disappeared, and the patient was able to rise from her long bed of sickness and go about. We bring this remarkable case before the public, as it deserves to be considered an event in the annals of healing.

Düsseldorf. *Maria Zillekens.*

Mr. *Nitsche* had suffered for ten years from violent cramps in the abdomen, combined with cold fever. Various means were tried in vain. When Mr. *N.* consulted a magnetopathist, he had very little hope left, but at the conclusion of the treatment he was completely cured of the

disease which had threatened his life. The patient felt the direct effect of the magnetism.

Magnetism. (Anæmia.) TREATMENT.—The hands should be placed for ten minutes open on the abdomen (right hand on left side and vice versa). Treatment should be applied two to three times a week and success must not be expected under from three to six months. Avoid acid or sour food and drink much milk. See also pages 908, 910.

Being restored to health to-day by your exceedingly successful treatment from a ten years' weary illness, and being about to go back to my home, I write to return my most heartfelt thanks to you, my dear sir, and also, most warmly and cordially, to recommend you and your method of treatment to everybody and particularly to all despairing patients, who, like myself, have given up all hope of relief, as it is capable of producing such astounding results. I suffered for ten years with very severe chlorosis, and frightful, alarming nervousness, with chronic nasal catarrh affecting me for years; constipation, unbroken gloomy mental condition, timidity, trembling in the limbs, perpetual fatigue, aversion to light, headache, vertigo, short breath, eructations from the stomach, difficulty of swallowing, defective memory, and temporal mental weakness. This accumulation of diseases made me despair of the possibility of ever improving, to say nothing of recovering my health. In this desperate condition I adopted your treatment as a last resource. The immediate result was surprising; I felt at once lighter and calmer, my exceeding nervousness decreased perceptibly. In the course of six weeks—with frequent intervals of four or five days—I had altogether sixteen sittings, but to my own and my friends' great astonishment I feel that they have given me back health and strength. I wish that patients, who, like myself, despair of finding help anywhere, would make a trial of this extremely simple mode of treatment.

I am most willing to give any further information touching my case.

Anna Hofmann, Bromberg, Ritterstrasse 3.

My daughter, aged eighteen years, who was, according to our family doctor, anæmic, was cured by a course of magnetic treatment in a very short time. *Peter Thrau.*

Torfbruch, near Gerresheim.

Magnetism. (Appetite, Loss of.) Treatment, see "NERVOUSNESS."

For many years I suffered from violent nervous pains gradually spreading over the whole body, also from palpitation of the heart and loss of appetite. Having taken medicine for a long time without any

result, I at last put myself in the hands of a magnetizer in this city, Mr. *R.*, who cured me of my troubles in a short time.

As soon as Mr. *R.* touched my head with his hands, I felt a current going through my body; this procured perspiration and a feeling of fatigue. I bear grateful testimony to the remarkable cure which Mr. *R.* has effected in my case. *Marie Turack.*

Berlin, Sept. 11, 1892.

Magnetism. (Asthma.) TREATMENT.—Place the right hand on the left side of the patient's chest and the left hand on the right side for about five minutes and then make about one hundred passes from above downward and away from the patient. See also pages 908, 910.

Eight years ago Dr. *von Kern*, of Munich, was cured by magnetism of chronic asthma from which he had suffered for twelve years, and which for two years had made it impossible for him to continue his practice. Since then he has been in good health. He is now the director of the hospital in Schabing, near Munich, and is always glad to give any information concerning the healing power of magnetism. His testimony is as follows: "Twelve years ago, in consequence of a violent cold, I contracted severe affection of the bronchi and suffered ever since from asthma. At last I came to the conclusion that the nerves, as the conductors of the electro magnetic vital principle, could be restored to their normal condition by the application of animal magnetism. This has been fully confirmed by the treatment I underwent at the hands of Mr. *R.* After the first sitting I felt a decided improvement and again enjoyed undisturbed sleep. The cure was completed in a few weeks. I gladly testify to Mr. *R.'s* success. D. *v. Kern.*

Munich, Oct. 18, 1876.

Magnetism. (Burns.) TREATMENT. The hands are held at a distance of from one to two inches from five to ten minutes over the burns (right hand on left side, and vice versa), and then about one hundred rapid passes made over them. The result is almost immediate. See pages 908, 910.

On the 8th of November my child, aged twenty-two months, was badly scalded through the carelessness of a servant who upset a large glass of boiling milk over its neck and left arm. We at once obtained the assistance of a magnetopathist, Mr. *K.* When the latter began to make passes over the terrible wounds, we could see them turn a pale color and the healthy skin form over them. The arm, which had been swollen

to the size of a man's, returned to its normal size. After a few repetitions of the treatment the child, who, we were at one time afraid would die, was cured in a remarkable manner, for which we herewith tender our thanks to Mr. *K.* We shall at all times be glad to give further information. *H. Przedecki.*

Cologne, December 10, 1897.

My little child, aged three and a half years, had been scalded on the arm and back through the upsetting of a pail of boiling water, and suffered intense pain. After Mr. *T.*, a magnetopathist, had treated the child, the pains at once disappeared and the wounds began to heal.

Düsseldorf, January 27, 1891. *Johann Hartjes.*

Magnetism. (Caries of Bones.) TREATMENT. Only very great magnetic force and force which has been tested can be of service here. The diseased parts must be treated daily from five to ten minutes by holding the outstretched finger tips over them; compresses with magnetized water should also be used.

Two years ago my little child, then in its second year, suffered from large sores on the arm and between the fingers. One of the doctors, whom I consulted, declared the disease to be caries of the bones, and said the child would have to go to the hospital to have the bones scraped. I went, however, to a magnetopathist, Mr. *T.*, who cured the child in eight sittings. It has remained in good health ever since.

Düsseldorf, Ellerstrasse 145, September 6, 1891.

Mrs. *L. Küpper.*

My son, aged eight years, had been suffering for thirteen months, from January, 1896, from caries in the lower leg. The boy had to undergo four operations which, however, were unsuccessful. After he left the hospital I put him under the treatment of a magnetopathist, Mr. *H.*, in Essen, who operated on him nine times, in January and February this year. After a few sittings a piece of splintered bone worked itself out of the leg which had been operated on. The boy, who was cured by Mr. *H.* in the time I have mentioned, has had no trouble with his leg since. He can run about like other children and without special fatigue. I herewith tender my best thanks to Mr. *H.* for his surprisingly successful treatment. Mrs. *Aust.*

Caternberg, Eichstrasse 30, May 7, 1897.

Magnetism. (Catalepsy.) For treatment, see "SPASMS."

My daughter, *Walpurga*, now twenty-four years old, had been confined to her bed suffering for more than two years in consequence of violent attacks of cramp. Three doctors tried all the means at their command without success. She was in such an exhausted condition that she could not even move her arm, and looked upon herself as dead for this world. One day I heard that Mr. *K.*, whose method of treatment was so widely celebrated, was staying in Baden-Baden. I at once called on him and begged him to visit my sick daughter. At the end of the fourth visit all pain had vanished, and she was able to get in and out of her bed without help. After seven operations she was completely cured, and is now as strong and healthy as if she had never gone through such long and terrible suffering. I and all my family thank the Almighty for this wonderful recovery, and we also owe a life-long debt of gratitude to Mr. *K.*, recognizing to the full his remarkable skill and sympathetic treatment. *Hubert Schneider*, Iffezheim.

I hereby certify to the truth of the above.
Iffezheim. *Schäfer*, Mayor.

It is a remarkable fact that the patient at one time was for fourteen days in a cataleptic condition, during which she could neither eat nor drink. The doctor who was attending her was unable to force her jaws apart.

After the recovery of her health, the girl was for a long time in the service of the Countess *v. Rohde*.

Magnetism. (Cholera Nostras.) Treatment.—The hands should be placed for ten minutes daily on the stomach and abdomen (right hand on left side, and vice versa).

My child suffered for over a year from cholera nostras and was cured by three magnetic applications.
Düsseldorf, June 20, 1894. *W. Carl Preusse.*

Magnetism. (Consumption.) Treatment.—The hands must be placed upon the bare body for about ten minutes (right hand on the left side, and vice versa); passes should then be made slowly over the whole body, from head to foot, without touching the skin. Fifty magnetic passes may suffice. This treatment should be performed once daily, but must be discontinued for a day, should the patient feel very fatigued after a sitting. See pages 908, 910.

Five and a half years ago, when I lived in Düsseldorf, my little child, at that time six months old, was ill with consumption, and had been given up by five doctors as incurable. A magnetopathist then cured the child in eight sittings, and he is now a fine, healthy boy.

Duisburg, April 26, 1896. *Carl Thelen.*
Neudorferstrasse 62.

Five months ago my child, now two years old, was declared by the doctor to be suffering from consumption and pronounced incurable. It was cured by seven magnetic operations, for which I herewith express my thanks.

Düsseldorf, November 22, 1897. *Max Feldmann.*
Derendorfer Strasse 11.

Magnetism. (Deafness.) TREATMENT.—Place the finger tips in the ears (right hand in left ear and vice versa), and then before the nose, the patient making vigorous inspirations through that organ. Twenty to thirty minutes' treatment daily.

I had suffered from deafness for four years, during which time I was unsuccessfully treated by three doctors.

I then applied to a magnetopathist, Mr. *R.* in Berlin, who discovered an induration of wax, and cured me of the malady in a short time, for which I express my hearty thanks to that gentleman.

Stettin. *Heinrich Fischer.*

Magnetism. (Debility.) TREATMENT.—For weakness in the back the treatment is the same as for rickets, which see. It is also advisable, to rub the back downward for two minutes daily, morning and evening, with a linen cloth dipped in magnetized water. See pages 908, 910.

For the sake of the cause of curative magnetism we consider it our duty to testify to the following case of healing. Our little boy, now in his sixth year was made to wear iron splints to straighten his legs when two years old, which produced such a weakness in his back that made it almost impossible for him to walk. This condition lasted for two years, and no permanent improvement could be effected. We now heard of the successful results of magnetic treatment as applied by the magnetopathist Mr. *T.*, and decided upon going through a course of treatment under him, a decision which we have never regretted. At this moment, after about fifty applications (two a week), our child has so much improved that he is able to walk about like other children. We tender

our hearty thanks to Mr. *T*. for this result and shall at all times be glad to give any further information.

Düsseldorf. *R. Klemann,* Watchmaker.

For fifteen years my wife had suffered from nervous troubles, accompanied by extreme general weakness, so that she could no longer stand upright or walk. The best doctors were consulted but could do nothing. Her condition grew worse in spite of their efforts, so that finally my poor wife, at that time scarcely forty years old, believed that she would have to spend the rest of her days in her invalid's chair. Then she heard of the wonderful cures of Mr. *K*. the magnetizer. To his aid she owes her complete recovery. She has now been for a year in the full possession of her health and strength, to which I herewith testify, with warmest thanks to Mr. *K*.

Freiburg. *Friedrich Count v. Rhode.*

Magnetism. (Diabetes.) Treatment.—Place the hands for ten minutes on the region of the kidneys. The proper diet for this malady has to be carefully observed at the same time. Treatment daily or every other day, should the patient feel fatigued. See also pp. 908, 910.

For ten years I was afflicted with diabetes mellitus and excessive nervousness. My condition was very critical. I went to Karlsbad, where I certainly obtained some relief, but it was only temporary. In consequence of having before me the prospect of never being cured—the disease being reputed to be incurable—, I became a confirmed hypochondriac. I consulted many physicians, tried everything that was recommended, till at last my attention was called to bio-magnetism. I must confess that I had but small faith in it; I applied to the magnetopathist, Mr. *Hofrichter,* and noticed, after three sittings, that a complete revolution was going on in my system, my state of mind became calmer, and after the ninth application the secretion of sugar in my urine had almost entirely ceased. I then went on a long journey during which I did not observe a strict dietetic regimen, just to see, how far my state of health had permanetly progressed. After my return, I had my urine analyzed, and not a trace of sugar was found in it, and I live in the hope, that my recovery is really permanent. I publicly testify this to be the plain, unvarnished truth. *M. H.,* Dresden.

Magnetism. (Diphtheria.) Treatment.—An unprofessional magnetizer should not venture upon the treatment of diphtheria, unless the previous results of his treatment have shown him to be possessed of more than usual magnetic force.

Sitting down in front of the patient, the operator holds the finger tips of both hands from five to ten minutes at the distance of about an inch from the patient's mouth, which should be kept as wide open as possible, and then makes passes into the mouth as if throwing something into it. Magnetized water is administered internally. Some of the water should also be held as long as possible in the mouth and then ejected.

This treatment is to be repeated two or three times daily. After at least three sittings an improvement ought to be noticed. If no improvement takes place after three sittings, an experienced magnetizer must be called in or other means employed. See also pages 908, 910.

My little boy, aged two years, was declared by the doctor whom we consulted, to be suffering from scarlet fever and diphtheria. As the illness grew worse and we were told by the doctor that it was useless to give any more medicine, I applied in my anxiety to Mr. *T.*, a magnetopathist, since the boy had taken no nourishment for three days, and Mr. *T.* had treated the boy previously. On Saturday the 29th of November Mr. *T.* commenced the treatment; the fever subsided immediately and the child had a quiet, instead of a sleepless night as previously. When the doctor who was treating the case called next day he noticed that a great improvement had taken place, and that the danger which had been so threatening three days before, was over. After six more treatments with magnetism the child was declared by the doctor to be cured. I gladly make this successful result of magnetic treatment known, that many parents may be induced in similar cases, to save the lives of their children by these means. I offer my most cordial thanks to Mr. *T.*

Düsseldorf, December 5, 1890. *A. Merten.*

Full of gratitude I write to inform you that my three children have been completely cured of diphtheria by your treatment with magnetism.

Whereas with my son *Franz*, aged seventeen years, paralysis and choking fits occurred after twenty-four hours, and we were sadly looking forward to his immediate death, the disease with my two younger children *Julie* and *Adolph* was of a less virulent type, and they could leave their beds cured after three days. With my eldest son, whom we had previously given up for lost, a critical turn in the disease took place on the fourth day, after which his cure was effected without the application of any medicine whatever in another four days.

You prescribed magnetized water for gargling, and it had an excellent effect. I thank you for the wonderful cure of my children,—a cure all the more surprising, as most cases of diphtheria, occurring in this neighborhood, end fatally with every other way of treatment.

I give publicity to this and recommend bio-magnetism as a remedy to everybody, acting—as it does—with wonderful rapidity on all diseases, a fact of which we have fully convinced ourselves. Once more thanking you from my heart, I remain,

Yours sincerely,

Franz Skrabel,

Imperial and Royal Police Commissioner in Dombhat, Transylvania.

I certify with much pleasure and gratitude that you have cured me of a severe attack of diphtheria.

I felt the magnetic current course hotly through my body, which then broke out into profuse perspiration. The violent fever vanished completely in two hours; the next morning the entire coating was gone and I could breathe again. I testify to this cure with hearty thanks.

Berlin, April 4, 1896. *E. Griesinger.*

A very interesting case of cure is that of *Alfred Albrecht*, aged two and a half years. After recovery from diphtheria, he had, as a consequence of the disease, acquired a reeling walk and let his head hang down over his shoulder. In addition to this he squinted and stammered, and became pigeon-chested. A magnetopathist in Leipsic, Mr. *S.*, succeeded in restoring the head to its proper position, in curing the partial paralysis, in removing the squint and stammer, and in restoring the chest to its normal shape. The improvement became visible after a few sittings, and a complete cure was the ultimate result.

This success requires no comment. Many people witnessed the progress of the cure, so that the little lad was for a time the centre of attraction in Mr. *Sch.'s* waiting-room.

Magnetism. (Diarrhœa.) Mrs. *D.* suffered from diarrhœa; all the remedies tried were unsuccessful. In consequence of advice she put herself under magnetic treatment, and the result was a brilliant success after three sittings. The patient felt the current through her whole body.

Magnetism. (Dropsical Swellings in the Joints.) Treatment.—**Place the finger tips (right hand on left side and *vice versa*) for from five to ten minutes over the part affected, and then make a few passes over it. This treatment can be repeated daily.** **See also pp. 908, 910.**

Testimonial from Baron *von Quadt*, Oppeln:

My daughter, aged sixteen years, had suffered for more than three years from water in the knee and occasionally in the arms, and had used the various remedies prescribed for her during this time by different physicians of good position, including steel-baths, with no perceptible result. Last December she was put under the treatment of Mr. *K.*, the magnetopathist, for a short time and with a surprisingly favorable result. After, in all, seventeen sittings her condition might be described as entirely changed. Not only had her general health, the disturbance of which, by her disease, had shown itself in lassitude, loss of appetite, etc., improved in a most gratifying manner, but her former frequent and violent pains, which had prevented her from using her limbs freely, had almost entirely disappeared, and last February the former invalid was able to indulge regularly in skating, though with some caution, a thing which would have been considered incredible a short time before. The few slight reminders of her former troubles, occurring now and again, have gradually vanished. Taking advantage of Mr. *K.'s* stay in this town, on whose behalf I gladly and thankfully publish this testimonial, the treatment has been resumed for a few days, in order to make the cure as permanent as possible.

Baron *von Quadt*.

Magnetism. (Dropsy.) Treatment.—The operator takes up his position in front of the patient, and places his open hands (right hand on the left side and *vice versa*) on the back over the kidneys, holding them there quietly for about three minutes. The hands are then brought round the body to the abdomen where they are again allowed to rest for two minutes, and finally to the bladder with a minute's pause. This process is to be repeated three or four times. The treatment may be applied daily. See also pp. 908, 910.

My little daughter, aged seven years, contracted curvature of the spine two years ago in consequence of a fall down some steps; I at once consulted a doctor, but in spite of everything the child got weaker. For twelve months she had to lie on cushions, and this being useless, I went with her to Bonn; there she had to wear a special corset, but left it off again by the advice of a doctor of this town who declared she was suffering from tuberculosis and dropsy, and would die in three weeks. She finally got so weak that she could neither stand nor walk. At this time the accounts of the remarkable magnetic cures effected by Mr. *T.* in Düsseldorf reached my ear. I went with the suffering child to Düsseldorf. After a two-months' course of treatment the child is well and happy,

plays about with her companions, takes long walks, and feels so strong that we are warranted in regarding the cure as completed. I herewith heartily thank Mr. *T.*, and hope he may live for many years to heal the suffering, free from the envy and ill-will of doctors.

Mayen near Coblenz. *Jac. Clasen*, Miller.

I hereby thank Mr. *T.* in D. for curing me of dropsy four years ago in twenty-nine sittings. I had suffered from this complaint for years and had been treated by several doctors without success. I had also been tapped thirty-three times. I am at all times ready to give any information about my case.

M.-Gladbach. *Lorenz Bössem*, Merchant.

My daughter, sorely afflicted with dropsy, was, with God's help, saved from death by Professor *Hofrichter* in Dresden by the application of magnetism, a fact which I willingly and publicly testify to in the interest of other helpless sufferers.

Since May, 1889, she had been suffering from chlorosis which soon developed into dropsy. She became gradually worse, the disease extending over her whole body, in spite of a four-months' stay in the country. From the beginning of 1890 she was confined to her bed. The medical advice which she had there and elsewhere was absolutely useless, and on January 31st the disease had made such progress as to cause apprehension of paralysis of the heart taking place shortly. The patient was given up for lost by all the doctors attending her, not having taken any medicine for weeks, with the exception of morphia, in order to calm her. Professor *Hofrichter* being recommended to me, I applied to him in my distress. He came, placed himself at the foot of the patient's bed, fixed his eyes upon her in a soothing manner, and caused animal magnetism to stream over her, blowing also gently over her head, hair, and face; after minute inspection and examination he declared his ability to send her into a magnetic sleep. He looked intently at her, made passes over her head, face, and body, outside the bedclothes and without touching her, keeping his hands at rest for some time at the joints, and particularly over the feet. After a few minutes magnetic sleep set in. During this sleep she heard everything and even answered his questions, but could not move; she coughed no longer, had no difficulty in breathing, and when her hands were raised, they fell down again, as though she were dead. She was completely conscious, and I was particularly pleased, that he carefully avoided any hypnotic manipulation. When she was given magnetic water to drink, which had an uncommonly soothing effect upon her, the magnetic sleep ceased, as Professor *Hofrichter* had predicted. The result

was surprising; the patient said that when her hair was touched, she heard a crackling noise in it, and as a consequence of the whole process altogether she had a feeling of new life flowing into all her limbs,— her toes, in particular, being all astir, as she expressed herself. In the night of the first of February—after the first treatment—she slept perfectly quiet for the first time in a week and without using morphia, and her heart felt considerably less oppressed in consequence.

Professor *Hofrichter* continued for about a week with the daily applications of magnetism, later on at longer intervals, and recommended her, besides, to drink magnetic water, and prescribed vegetarian diet. The swelling, difficulty of breathing, and pain decreased perceptibly day by day; her general health showed improvement, and she now took a walk by herself, for she felt stronger than at the beginning of her illness.

Magnetic sleep was more rarely resorted to, as the course of the treatment proceeded; the patient experienced, even in Professor *Hofrichter's* absence, several critical, beneficial turning points in her disease, and felt more and more relieved in consequence of them, and after five weeks she could leave her bed. She is now *out of all danger*, and her bodily strength has increased wonderfully.

Filled with the deepest gratitude to Divine Providence and to your work, I herewith certify to the recovery of my dear child, whom I had believed lost, and can, with full conviction, most highly recommend the application of bio-magnetism.

J. Göhre, Dresden.

Magnetism. (Ears, Affection of the.) Seldom curable, as the malady is generally caused by organic defects.

Treatment.—The finger tips to be held in the ears as in deafness. See also pp. 908, 910.

Dear Friend:—

I received your letter with the magnetic papers, and used them at once on the same day they arrived, following the instructions your uncle *Blechinger* gave me, to put them on both ears before going to bed, and keep them there all night.

The very *next morning* I could hear much better with my left ear, and, moreover, the noise in my right ear, which had previously been so very troublesome, had ceased altogether.

Thanking your uncle meantime most sincerely, I remain, etc.

Gotzis, March 12, 1892. *N. N.*

Magnetism. (Epilepsy.) TREATMENT.—The patient must be seated on a chair, and the operator lays his hands (right hand on the left side and *vice versa*) for about ten minutes on the back of the head, afterward making about a hundred passes over the head in a downward direction, away from the body. In obstinate cases it is advisable to use only the right hand (positive). If the attacks only come on at intervals of a fortnight or a month, the treatment should be repeated only once or twice a week. If the intervals between the attacks are shorter, there should be four or five sittings a week, or one sitting a day. Non-stimulating diet to be adopted, with entire avoidance of spirits, coffee, and tea. See also pp. 908, 910.

My sister had suffered from epilepsy and had died during an attack. From fright I contracted the same terrible disease which has tormented me for a year and a half. Regularly every other day I had an attack with convulsions, lasting for an hour and depriving me of consciousness. Since I was magnetized by Mr. *T.*, about two months ago, the attacks have entirely ceased. I have been able to sleep well, recovered completely, and feel well and happy.

Düsseldorf, Fürstenwall 198. *Agnes Fischermann.*

Dear Sir:—

As you have cured my daughter *Ida*, who had suffered for nearly two years from frequently recurring attacks of cramp which ordinary medical treatment had entirely failed to remedy, I take the liberty of thanking you again herewith most heartily for all your kindness and attention in the treatment of my daughter, with the sincere hope that the same happy result may be the fate of all seeking your aid.

Dresden, May 6, 1890. *Karl Heinrich Michel.*

To Mr. *Gustav Oehmichen*, Magnetopathist.

My daughter *Anna*, fourteen years old, had suffered for about a year with epilepsy, and had from four to five fits every day. Various remedies were applied without success. Hearing one day of Mr. *Oehmichen's* system of cure, I confidently sent her to this gentleman. After the seventh sitting no more epileptic fits appeared, and after the fourteenth sitting she was discharged as cured, nor have we to this day noticed the faintest vestige of her disease.

I, and all my family, thank God for this strange, miraculous recovery, but we express our recognition at the same time to Mr. *Oehmichen* for his wonderful cure and his kind treatment.

Thum. *Ernst Mauersberger*, Stocking Manufacturer.

My daughter, aged eight years, had been for seven years afflicted with most violent epileptic fits, so violent, that she destroyed everything that came in her way. On the average she had from eight to ten of these terrible attacks during the day, and from eight to twelve at night. She would foam fearfully at the mouth, roll her eyes, and strain her hands. Medical help was completely powerless in her case. Bromide of potassium, which was prescribed, had no effect upon her whatever, and her condition was only rendered more desperate by it.

I read something about the magnetopathist *W. Reichel*, Zimmer-Strasse 60, and requested him in consequence to pay me a visit. It was my last resource. He came, and after the very first treatment, these horrible fits ceased in the daytime, though they still came on at night. Afterward they appeared again by day, but they were very slight.

After the fifth treatment my child got so exhausted and apathetic that she could hardly move, and lay like one dead. After twelve sittings the fits did not return, and she jumped about more cheerfully than ever. She also begins to speak now slowly, whereas hitherto, in spite of her age, she was only able to utter inarticulate sounds.

Mr. *Paul Küchler* suffered from epileptic cramps which came on daily. They were cured by magnetism by Mr. *Sch.*, Leipsic.

Magnetism. (Eruption, Cutaneous.) TREATMENT.—The affected parts should be treated by holding the hands over them at a distance of about two inches for five minutes (right hand on left side and ***vice versa***), about a hundred passes being afterward made over them. The treatment to be applied twice a week; the parts to be cleansed daily with magnetized water. For Modes of Application, see Index. See also pp. 908, 910.

My daughter, aged thirteen years, suffered from an eruption on her whole body, and was cured by Mr. *Tormin*, magnetopath, in a few sittings.

Düsseldorf (Weihe-Strasse 29), March 17, 1896. *H. Gnörieb.*

Magnetism. (ERYSIPELAS.) TREATMENT—See "SHINGLES."

For seventeen weeks I had been tormented with erysipelas, suffering intense pain. My whole face and nose were swollen and inflamed. The swelling and pain subsided after the very first magnetic sitting. After five sittings I was cured. My daughter was cured of obstinate headache and stitch in the side in the same manner.

Schrigwitz near Leuthen, January 31, 1883.

Rosina Wagner.

Magnetism. (Eyes, Affections of the.) TREATMENT.—The right eye must be treated with the left hand, and the left eye with the right hand, the finger tips to be held for five minutes at a distance of one inch from the open eyes. Application twice a day. See also pp. 908, 910.

I suffered from concussion of the brain when a child, and had continual headaches for thirty years. In May, 1892, I became blind, and also partly lost the power of speech and the use of my limbs. Prof. *Mendel* told my mother I was too weak for the application of electricity and massage, that it was a sad case and he could not help me. A magnetopathist subsequently cured me completely in eight sittings. I can walk again without the help of a stick, have recovered my speech, and can see well enough to read the smallest type. My headaches have also disappeared. On the 19th of January, 1893, I called on Prof. *Mendel* in Berlin, in the presence of his patients, in my restored condition. My cure has been miraculous.

Berlin-Moabit (Rathenower-Strasse 46), January 23, 1893.

Ernestine Spangenberg.

Wilh. Sommer and *Hermann Spangenberg*, brothers of the patient, both residing in the same house, testify to the truth of the above.

I had suffered with my eyes for twenty years. Thirteen of the most celebrated doctors tried their skill on me. During the last five years I have been assured after the most careful examination with the ophthalmoscope, lasting for hours, that no help was possible in my case. Three months ago I went to Mr. *K.*, then in Friedrichshafen. I felt a decided improvement after the fourth sitting and can now read and write again. Believing that I have been saved from blindness, I express my thanks to Mr. *K.*

Hemmenhofen am Untersee in Baden.

N. Siebert, Catholic Priest.

That Father *Siebert* has preserved his eyesight and can read the smallest writing, is confirmed by a postal card sent to me some years afterward.

The Provincial Government of the Rhenish Provinces was induced, in view of the many remarkable cures effected by *Tormin,* to put a boy of the name of *Thönissen* under his treatment. The boy had spots on his eyes and a pronounced thickening of the cornea, and suffered in consequence from advanced nearsightedness; he had been treated for six months in Bonn and was discharged as incurable. *T.* restored the boy's

sight to its normal condition after forty-one magnetic operations. Results like these, properly vouched for as they are, cannot fail to win new adherents to the beneficient magnetic treatment.

Five years ago my little boy, then six years old, had been suffering for a year and a half from inflammation of the eyes and was cured in one sitting by Mr. *Kramer.*

Düsseldorf (Flingerstrasse 45), February 23, 1892.

Fr. Dippold.

Magnetism. (Feet, Swollen.) Treatment—Same as for swollen glands.

I herewith gladly certify that Mr. *R.*, magnetopathist of Berlin, has cured me of an inflamed and swollen foot in one application.

Countess *Louisa von Schulenburg-Burgscheidungen.*

Magnetism. (Fever.) Treatment.—The hands (right hand on left side and *vice versa*) are placed at the back of the head, without resting on it. About fifty passes are then made over the chest, and away from the body.

Mr. *Rudolph Schlueter,* manufacturer (Dresden, Johannisstrasse 6), confirms in a feeling letter his wife's cure of a severe low fever, accompanied by a general loss of strength, failing memory, apathy, and total depression of the nerves, which would no longer react on the most powerful medicines. The patient, a lady of a delicate constitution, who never was strong and who suffered previously for years from severe megrim, was reduced to the last extremity. She was restored to health in twenty-six sittings, and says that she has never yet been so well as she is now, and manages her house with the greatest ease and ability.

Magnetism. (Fungus Vasculosus.) Treatment.—The finger tips (right hand on left side and *vice versa*) are held above the malignant growth at the distance of about an inch, and kept there for from five to ten minutes; then about hundred passes are made over the part. The treatment can be applied daily. It is not always successful, and about fifty to sixty sittings are generally necessary.

My little child, aged one year, was suffering from *fungus vasculosus,* and had been operated upon without any result. A magnetopathist afterward cured the child with four applications.

Hilden (Klotzstrasse 5), July 12, 1896. *Tr. Emgen.*

Magnetism. (Glands, Swollen.) TREATMENT.—The finger-tips (right hand on left side and *vice versa*) are placed upon the swollen glands and the latter mildly massaged for about five minutes. Treatment to be repeated twice a week. See also pp. 908, 910.

My two sons had suffered, one of them for five years, from swollen glands. They were cured by magnetic treatment in ten and seven applications respectively.

Hilden (Bernratherweg 1a), May 31, 1896. *Paul Nelles.*

Mr. *Nisse* was suffering from violent pains in the face and glandular swellings. The patient felt the magnetic influence very distinctly. Six applications cured Mr. *Nisse* of the painful disease.

Magnetism. (Glands, Ulcerated.) TREATMENT.—The finger-tips (right hand on left side and *vice versa*) are held for ten minutes over the ulcers at the distance of about an inch, and compresses with magnetized water are then applied. Treatment once daily. See also pp. 908, 910.

For fifteen years I had suffered from ulcerated glands on the neck. I was operated on for the first time on the 19th of May, 1888, and was afterward in the hospital for thirteen weeks. On the first of June, 1892, I went into the Marien-Hospital for two months, during which time I was twice operated on by Dr. *Straeter*. As the malady grew continually worse, I was taken home by my mother. In April, 1896, I applied to Mr. *T.*, who has now, after eighteen sittings, so much improved my condition that I can consider myself as cured, and I herewith publicly express my thanks to him, and declare myself ready to give any further information.

Düsseldorf, November 14, 1896. *W. Müller.*

My little child suffered in its third year from open ulcers in the glands of the arm, and the doctor finally declared, there was no help for it, the arm would have to come off. A magnetopathist then treated the child, who has now been cured after forty-one sittings, and my warmest thanks are due to him.

Düsseldorf, November 14, 1892. *Johann Weber.*

Magnetism. (Gout.) TREATMENT.—Gouty matter already deposited cannot be removed by magnetic treatment. The hands are placed on the neck (the right hand on the left side and *vice versa*) for about ten minutes, and slow passes are then made from the neck downward over the

back as far as the toes. Treatment daily. Attention is to be paid to assimilation; pork to be avoided. See also pp. 908, 910.

My son *Hubert* had been very ill with gout from his sixth year. Hands and feet were crooked and the legs much swollen. Sleep at night was impossible, as the boy cried with pain day and night. For a year and a half he could not go to school, and at other times had to be absent for ten weeks. On the 4th of December, 1899, he was placed under Mr. *T.'s* magnetic treatment in Düsseldorf, and was able to go home on the 17th of February, completely cured after about thirty sittings. My son has since been in perfect health, and I herewith publicly express my sincere thanks to Mr. *T.*

Würselen, near Aachen, May 31, 1896.

Francis Joseph Hermanns.

In consequence of gout I had to endure the most violent pains in my hands for more than a year, and a number of sores formed which would not heal in spite of the remedies administered by several doctors. At last I applied to a magnetopathist, who caused the sores to heal up, and cured me of my painful and troublesome illness, to which I certify with much gratitude. *F. Falbin* (aged 81).

Stettin, August 11, 1892.

Magnetism. (Headache, Congestion.) Hyperæmia of the brain. TREATMENT.—Passes to be made from the head away from the body. (Right hand on the left side, and *vice versa*). Treatment, every day or every other day, should the patient feel fatigued. See also pages 909, 910.

In consequence of overwork I suffered from violent congestion, pressure in the head, and a painful, dragging sensation in the neck, which much impeded me in my profession. On my frequent professional journeys I contracted a rheumatic affection, for which I employed the celebrated hot baths of Teplitz without success. Having had occasion to witness the remarkable results of magnetic treatment on other sufferers, I put myself in the hands of a magnetopathist. The latter succeeded in radically curing my complaint in a few weeks, so that I am able again to follow my profession and undertake a long concert tour. I can most cordially recommend this system of treatment to all sufferers from congestion, nervous headache and rheumatism. With sincere thanks I remain, etc. *Eugen Raab,* Kammervirtuos.

Dresden, Ostra-Allee 21.

Mr. *G. O.*, Magnetopathist.

The long delay in expressing my thanks for the successful treatment, which I went through last February, is only owing to my desire to be fully certain that it was really successful. Not the slightest trace of my twelve years' illness (nervous headache) has returned. I can now again attend to my household duties, whereas formerly I had an attack every three weeks, compelling me to remain in bed for one or two days. Next to God I owe the restoration of my health to your treatment (I had seven sittings in all). I again thank you most warmly. May God strengthen you to be a help to many more sufferers. I can recommend this treatment with fullest confidence to all who are suffering, and am ready to give any information that may be required.

Chemnitz. *Anna Minna Taurscher.*

I cannot refrain f om writing to express to you my hearty thanks for having completely cured me of my nervous headache in six sittings.

Kappel, near Chemnitz. *C. A. Kircheis.*

Mr. *Charles Raetze,* Dresden, Alaun Strasse 23, writes:

"For a year I had suffered from an intolerable feeling of pressure in the head, which nearly drove me mad, and which was probably caused by the chronic constipation from which I had suffered for ten years. Twenty magnetic sittings sufficed to completely cure both ailments. The effect of the magnetized water after the third application was remarkable.

Mr. *Wiedenbeck* had an attack of violent rheumatism in the head, and was almost beside himself with pain. He was cured after five magnetic applications.

Mrs. *Sperling* suffered from excessive one-sided headache (megrim). After every imaginable remedy had been, as usual, tried in vain, magnetism had again to show what it could do. After nine sittings the patient was completely restored to health.

Miss *A. Schöne* suffered from very violent rheumatic headaches. All rubbings and other means were useless. In utter despair she came to Mr. *Sch.* and departed with beaming countenance at the end of her short course of treatment.

I herewith express my hearty thanks to Mr. *W. R.* For seven years I had been plagued with violent chronic pains in the head. Medicines

proving useless, I went to Mr. *R.* and after five sittings had completely recovered. I can cordially recommend Mr. *R.* to suffering humanity.

Massow. *Hugo Beckmann.*

For three years I had been suffering from terrible headaches, which were so violent that I could get no rest day or night. After I had consulted several doctors, whose medicines made me worse instead of relieving me, one of them sent me to the hospital. Here I was treated with wet towels and douches; in addition to this my molar teeth were extracted in the belief that they had something to do with my headaches. I was dosed with bromide, chloral, opium, morphium, etc. In three months I left the hospital with the pains worse, thoroughly ill in body, and a victim to the morphine habit. The headaches grew worse every day, and the craving for morphium, which certainly relieved me from the agonizing pains for ten minutes, was terrible. How fearfully I suffered may be judged from the fact that I was sometimes tempted to take my own life. The doctors finally said that such a case had never happened in their experience, and that with the best intentions they could not help me. I next tried homœopathy, but neither did that ease me of my troubles.

I at last heard of the many successes of magnetism and determined to consult a magnetizer. As soon as the latter placed his hands on my head I felt a warm, powerful current which had a beneficent influence over me. It is a remarkable fact that even after the first sitting the headache had left me for an hour. After a fortnight's treatment I was delivered from my terrible headache, and again found the refreshing sleep which I had missed for years.

I am overjoyed at the rapid and successful cure and thank the healer most warmly for it. *Lina Geitner.*

Stettin, 8 a Kronprinzessin Strasse, June, 1893.

My wife had suffered for nine years from severe gout in the head, which had got so much worse with time, that the attacks recurred regularly every eight to ten days, and reached such a pitch that my wife became almost unconscious and lay in convulsions in the most terrible agony.

I consulted various physicians, tried all manner of medicines, sent my wife to a watering place, and had electricity applied to her several times a week for a year, but all in vain; her state grew worse instead of better. I at last heard of a magnetopathist and the cures effected by him. Having read a good deal about magnetism and having followed with interest what was being done in this branch of science, I determined

to try the system and sent my wife to Berlin to consult this gentleman.

After she had been under his treatment for ten days, she came back completely cured and has since been in better health than she ever was before. She is overjoyed at having got rid of her terrible malady, and joins with me in warmest thanks to the magnetizer for the rapid and thorough cure of the disease which was shattering her constitution.

An interesting circumstance in the treatment was that my wife at once, as soon as the magnetizer had gently placed his hand over her head, felt a warm, powerful current and after a few minutes went to sleep.

I again express my warmest thanks for this successful treatment, while cordially recommending the system to all sufferers.

Stettin. *Edmund Eggert,* Merchant.

Further reports of cures will be found under "MEGRIM."

Magnetism. (Heart, Affections of the.) (Carditis, debility of the heart, paralysis of the heart, angina pectoris, or spasm of the heart and weakness of the valves of the heart.) TREATMENT.—Passes should be made beginning at the back, and bringing the hands round the body over the region of the heart (the right hand on the left side, and *vice versa*). The treatment to be repeated daily or every other day should the patient feel fatigued. See also pp. 908, 910.

Having recovered from severe illness, I feel it my duty to express my heartfelt thanks to the magnetopathist, Professor *Leo Hofrichter,* of Dresden, Chemnitzer-Strasse 18. I contracted rheumatism in consequence of a cold, which I caught in the beginning of last year, and though my condition seemed to improve for a time, it was soon again aggravated to such a degree that in the middle of June rheumatism of the heart set in. In spite of careful medical help and the greatest attention, no improvement took place; I was in high fever (101 to 106°), and at the end of October my pulse was 130 to 150 to the minute. Overpowering weakness of the heart came on several times, and I suffered also from irregular cutaneous action and abnormal perspiration. Finally when the doctors had already given me up, my family put me in the hands of Professor *Hofrichter.* He treated me from the beginning of November. On the 10th of that month I became completely unconscious and a critical turn in the disease with complete collapse set in on November 14th. My weight had during my illness diminished by

thirty-five pounds, so that I weighed at that time only ninety pounds. No medicine whatever was given me, and I had only magnetized water, and for food nothing but soups. From November 15th, ***my condition took such a favorable turn*** that I was able to leave my bed by the middle of December, and take ***my first walk*** in mid-January. At the end of that month I grew ***thoroughly strong*** again and my ***mental weakness***, resulting in loss of memory, left me in the middle of February. Since April I have again weighed one hundred and twenty-six pounds. ***I feel perfectly well*** and cannot, therefore, refrain from publicly tendering my heartfelt thanks to Professor ***Hofrichter*** for his particularly successful treatment by magnetism and recommend it to all patients affected with heart-disease, mental weakness and general debility, merely adding that the treatment is absolutely painless.

I will gladly give more circumstantial details of my case to anyone who takes an interest in it.

Radeberg, Goldbach Strasse 8, January, 1, 1890.

Alwin Geissler.

By the magnetic treatment of Mr. *W. R.* I have been healed in a short time of a nervous heart affection which had lasted over two years. Likewise, my son, who was consumptive, and whom Prof. *Koch's* newly discovered remedy brought to a rapid end, had to thank Mr. *R.'s* treatment for great alleviation of his condition in his last days. I can assert this in perfect truth for the benefit of those who still doubt the healing virtues of magnetism. Mrs. *Emma Thilo.*

Waldhause, near Hanover.
Villa Thilo, May 15, 1891.

I have suffered from a heart complaint from my youth. Every effort to cure it was unsuccessful. I saw cures effected in the case of other patients through the application of bio-magnetism, and put myself under this system of treatment. The course lasted three months, during which time the symptoms of heart disease completely disappeared. I feel perfectly healthy at the present moment, have become more capable of exertion, and am indebted for this result solely to the treatment of Mr. ***Hofrichter,*** of Dresden. May these few lines draw the attention of sufferers from heart troubles to the fact that the system of treatment by magnetism is the simplest and most effective.

Hermann Röber, Bachstr. 1.

My wife had been ill for years with a nervous complaint, accompanied by loss of appetite, palpitation of the heart, giddiness, general weakness, especially in the left side, and sleeplessness (she scarcely ever got three-

quarters of an hour's sleep at night). The illness continued in spite of medical treatment. One day, after a wretched night, my attention was drawn to an account in the papers of the successes of curative magnetism. A few hours later I earnestly entreated the magnetopathist, Mr. *K.*, of Breslau, to come with me to see my suffering wife. Ever kind and ready to help, this gentleman acceded to my request. After five minutes' treatment of my wife, who was moaning with pain, the feverish temperature sank to its normal level, the pains subsided and the patient was strengthened by four hours of refreshing sleep. After a few more sittings, which could now be held at Mr. *K.'s* house in Breslau, my wife was cured of her giddiness, regained her appetite and sleep, and is now healthy and happy.

Schwoitz, near Breslau. *M. Knorrn,*
March 22, 1893. Professor and Organist.

I herewith thank the magnetopathist, Mr. *R.*, of Dresden (Marschallstr. 55), most sincerely for having succeeded in curing my seventeen years old son from the most agonizing spasms of the heart, which for a long time came on every night. Whereas every other treatment proved utterly useless, the spasms entirely disappeared after the first magnetic sittings, and have not reappeared for three months.

Gompitz, near Dresden. *Heinrich Weber.*

Magnetism. (Herpes.) Herpetic eruptions are, of course, not touched with the hand during the treatment. The extended finger tips are held for a minute or two over the diseased parts (right hand on left side, and *vice versa*), and about one hundred passes are then made over them. Bathing the parts with water positively magnetized (*i. e.*, with the right hand) can be strongly recommended; soap and all rubbing with substances of an irritating nature are to be carefully avoided. The treatment can be repeated daily or three times a week. See also pages 908, 910.

For seven years I had been suffering from herpes esthiomenes on both arms. During the two last years my condition had got so bad that deep holes were eaten into the arms. I had to endure violent pains and could neither eat nor drink. Specialists, whom I consulted, declared that there was no help for me. Then I heard of the successes of magnetic treatment, and in my distress I applied to a magnetizer. Heaven be praised! I completely recovered after twenty-two sittings. I send you

my most sincere thanks, and deem it my duty to make my case public in the interest of all sufferers from this terrible malady.

Pohligshof, Solingen, April 20, 1897. *Carl Boos.*

In the month of June last, the magnetopathist Mr. *H.* in Essen cured my little daughter, whose body was covered all over with eruptions, in three sittings. I herewith tender him my sincere thanks, and can confidently recommend him to sufferers from the same complaint.

Essen (Steeler Chaussee), August 26, 1897.

Friedrich Nieswald.

For a long time I had a large, burning, painful sore in the left armpit. After eight applications of magnetism by Mr. *K.*, two months ago, the sore dried up and vanished.

Breslau (Werderstrasse 5b). *Agnes Scholz.*

Dear Sir:—

It is with special pleasure that I am able to inform you that I have experienced a decided improvement in my general health after your treatment; I would specially mention that the eruption on my two arms has been cured after a short course of treatment, though it had for years defied ordinary medical skill.

Please accept again my heartiest thanks, and make any use of my testimony you like on behalf of suffering men and women.

Berlin. *Emil Ubrig,* Manufacturer.

Magnetism. (Hip-Joint, Inflammation of.) Treatment.—The right hand is placed on the left hip, and the left hand on the right hip for five or ten minutes, followed by a few passes over the hips. Compresses with magnetized water can also be employed.

My boy, aged ten years, was suffering from acute inflammation of the hip-joint. The doctor declared that the boy would have to lay for six weeks on a stretcher (stretching bed), and after that he would see what could be done. Instead of this, the boy was taken to a magnetopathist. Immediately after the first application he was able to walk to the car. He had a few more sittings, and is now quite restored and able to go to school once more, although he holds a medical certificate absolving him from school attendance for six weeks.

Cologne-Ehrenfeld, December 10, 1897. *Gerhard Mölder.*

J. Gentsch, aged four years, had been suffering for three weeks from violent inflammation of the hip-joint, being unable either to walk or stand. After a few applications from Mr. *P. Sch.* in Leipsic the boy could walk about the room without assistance and without supporting himself with anything; after a few more applications he was completely restored.

This cure was effected in 1892. At the end of December, 1894, the boy was still in perfect health.

Fritz Teller had suffered from inflammation of the hip-joint. After the third sitting the pains disappeared, and after ten sittings the boy could walk for an hour without undue fatigue.

Magnetism. (Itch.) TREATMENT.—The parts affected are treated by holding the hands over them (right hand on left side and *vice versa*), after which passes are made. Soap should be avoided. Bathing the parts with magnetized water is advisable. See also pp. 908, 910.

My daughter, aged twelve years at the present time, had suffered from her birth with an eruption resembling itch. Every means had been employed without any result, till a magnetopathist cured the child a year ago in eight sittings.

Düsseldorf (Concordia-Strasse), October 23, 1894.

Fr. Knur.

Magnetism. (Knee-Joint, Inflammation of.) TREATMENT.—The finger tips to be held for about five minutes above the knee (right hand over the left knee and *vice versa*) at a distance of about half an inch, followed by fifty to a hundred passes. Treatment to be repeated daily, or two or three times a week. See also pp. 908, 910.

Miss *Adele Kaspers* of Solingen, in writing on July 1st this year to thank the magnetopathist Mr. *T.*, testifies that he cured her of inflammation of the knee-joint. Having been unsuccessfully treated by five physicians, and her leg having been in plaster-of-Paris for six weeks, she had come in her desperate condition to Düsseldorf, in order to put herself under magnetic treatment on the advice of her brother-in-law. She had felt so much better after the first three sittings, that she was able to ride in a street-car instead of a carriage, and after seventeen sittings had been completely restored to health. Further information will be given by her brother-in-law, Mr. *Möller*, of this town, Ober-Strasse 9.

Count *Frederick v. d. Recke, Jr.*, informed the magnetopathist Mr. *K.* that he had been suffering for years from inflammation of the knee-joint, which was finally declared—by the celebrated Professor *Langenbeck*

—to be incurable and an obstacle to his military career. In the presence of his uncle I placed my hand over the bared knee, at a little distance from it, whereupon the young count felt a powerful magnetic current through the whole side of his body. The cure was completed in twenty-two sittings. The count afterward entered the army.

Two years ago you cured me of a severe nervous complaint (hysteria) which had been treated for twelve months without the least success. A few weeks afterward I had the misfortune to injure my right knee, the consequence of which was a very painful inflammation of the knee-joint. As you were not in Dresden at the time, I had to employ a medical man, during whose treatment the leg continued to swell, and the pains increased. It had already been decided to encase it in a plaster-of-Paris bandage, that being the only hope of relief left. On your return, I requested you to come and see me. After the first sitting, there was a decrease in the horrible pains, the swelling subsided, and I could move my leg a little, and on the second day, to the great amazement of my doctor, I could move it with ease. After five sittings the disease had entirely disappeared. Yours gratefully,

Dresden (Strehlenerstrasse 56). Mrs. *E. S.*

Magnetism. (Limbs, Pains in the.) Treatment—As in "Rheumatism."

My daughter had suffered so long from pains in the limbs, combined with an obstinate and violent cough, that I feared the worst. Two months ago she went with me to Breslau and was cured by magnetic treatment. I had also suffered for a year from rheumatism in the left arm, which I could only move with the aid of my right hand. I recovered the free use of it after the first application.

Nippern. *Christiane Miess.*

Magnetism. (Lungs, Inflammation and Catarrh of the.) This complaint is specially amenable to magnetic treatment.

Treatment.—The hands are placed open on the chest (right hand on left side and *vice versa*) for ten minutes. Treatment to be repeated twice daily. After two or three sittings a marked improvement will have set in. Compresses with magnetized water are useful. See also pp. 908, 910.

Fritz J., medically certified to be suffering from inflammation of the lungs in a dangerous stage, was completely cured by magnetism in nineteen days.

Mr. *Sand* was also permanently cured of the same disease by magnetic treatment, a fact which was confirmed by him two years later.

Dear Sir:—

I am pleased to inform you of my complete recovery. I had suffered from catarrh of the lungs for a long time, and had been attended by several doctors who, however, could not help me. My illness lasted altogether nine years. Quite by chance I heard of the wonderful effects of magnetism, entirely unknown to me till then, and particularly unknown to us in Austria where it is denounced as something absolutely injurious. What will not a man do, in order to save his life for the sake of those he loves? On the urgent recommendation of a former patient of yours, I went to you to be treated with magnetism, and what I scarcely ventured to hope for was realized. Comparatively few sittings sufficed to afford relief and, at last, to bring about recovery from my long-standing disease of the lungs. I cannot, therefore, any longer neglect to acquaint you with a fact so gratifying to me.

Since that time two years have passed, and in spite of my close, sedentary mode of life, I have, to my greatest astonishment, been perfectly free from this troublesome illness. I fulfill an agreeable duty, therefore, in recommending most highly and from deepest conviction the scientific application of animal magnetism in general, and Professor *Hofrichter's* excellent treatment in particular, which, in the hands of this practical magnetopathist, has stood the test of many years. I remain, dear sir,

Yours truly,

Josef Bataz, Postmaster.

Kittlitz in Bohemia, August 19, 1898.

Mr. *Kittner*, of Breslau, was dying of inflammation of the lungs. The doctor, on leaving, had said to his family: "The patient will only live a few hours longer. Don't send for me again. Nothing can save him." Then Mr. *Kittner's* sister called on me and begged for help. After I had held my hands for five minutes over the chest of the patient, who was unconscious, he was able to breathe again easily and deeply. He recovered and lived. This case was observed at the time in the editorial portion of the Silesian "Morgenblatt." In the same journal Count *von der Recke-Volmerstein* publicly acknowledges that the reports that have reached him, both in writing and orally, of a number of remarkable cures made by me, have had the effect of convincing him, and that he is consequently able to recommend the magnetic treatment to the public.

K.

I was ill for five months with a serious inflammation of the left side of the lung, accompanied by copious expectoration. I went to Breslau to the magnetopathist Mr. *K.* and was completely cured in nine days. Expectoration, sleeplessness, lassitude, want of appetite, and pain have all disappeared.

Breslau. *Franz Wallach.*

Magnetism. (Lymphatic Vessels, Inflammation of the.) Treatment—See "Phlebitis."

I was suffering from inflammation of the lymphatic vessels, which my family doctor did not recognize and treated as rheumatism of the joints. After a three-weeks' treatment I was in such a low condition that even my physician gave me up.

Then my wife, who had heard of the cures of the magnetopathist Mr. *R.*, consulted him. Mr. *R.* completely restored me in a week, so that I am, in fact, indebted to him for my life.

Berlin, March 5, 1892. *Reinh. Gerling.*

Magnetism. (Megrims.) Treatment.—Place both hands on the head (right hand on the left side and *vice versa*), then make passes away from the body. To be repeated daily. See also pp. 908, 910.

Miss *Anna Nauk* of Krischendorf, near Pillnitz, came under my treatment three years ago. She had been suffering for six years from violent megrim, incapacitating her completely for her work. The first sitting, during which the patient expected every moment to have an attack of her malady, was a surprising success, and the result of ten sittings was complete recovery of her health which has remained good to this day. She is stronger and stouter, has a healthy appearance, and her digestion and blood circulation leave nothing to be desired.

The complete cure of my illness induces me to thank you most sincerely, dear professor, for your trouble. I suffered with this malady for many years; no doctor could give me relief; I used the waters of Pyrmont, Ragatz, Augustusbad, without any benefit accruing from them, and through you, dear sir, by the application of animal magnetism, I have regained my health after barely two months' treatment. Even after the first sitting I felt an increased vitality throughout; I became stronger, my appetite improved, and now I feel better than I ever did before; headache and sickness have completely disappeared. I must own that I am astonished at the result of the treatment, for I openly confess that I

came to you at first more from curiosity than anything else. I had heard, it is true, much of your marvelous cures, but, to speak candidly, never had much faith in them. I wished to convince myself what truth there was in it, since I only believe in what I have myself seen and tested. What I saw, however, during the short time I was with you, not only surprised me, but caused me to be a convert to and an enthusiastic votary of magnetism. I now know that magnetism is a fact beyond all possibility of dispute. If I had not experienced it myself, I should have thought it incredible that sickness could be cured by merely putting the hands on the patient, without any medicine whatever; I would have doubted still more that you could possibly, solely through your power and will, produce magnetic sleep in all kinds of people, if I had not been repeatedly a personal witness of these experiments and therefore obtained positive proof. The purpose of this letter is to express to you my utmost gratitude for my successful recovery by means of magnetism.

Very sincerely yours,

Dresden, December 10, 1883. *M. N.*

My daughter *Emma* had suffered for five years from attacks of megrim, often two or three in a week, and of such violence that the child was incapable of any exertion, lost all inclination for games, and had continually to keep to her bed. During these five years we had tried every sort of medical treatment in vain; her health showed no signs of improvement. At last I heard of the brilliant results achieved by the magnetopathist Mr. *R.* in Berlin, and requested him to take her under his charge. Mr. *R.* was of the opinion that worms were the cause of her troubles. The treatment was directed toward the expulsion of the parasites, and we had the great pleasure of seeing that the root of her malady was removed. We had at last found what we had vainly sought for years.

Four months have passed since her cure was completed, and up to this date my daughter has had no return of the troublesome and painful malady.

I gladly express my thanks to Mr. *R.* for his intelligent and successful treatment, and recommend everybody suffering from this disease to have recourse to the same system. ***Otto Below.***

Magnetism. (Menstruation, Deficient.) TREATMENT—See "ABDOMINAL COMPLAINTS."

Having been cured by you in twenty-six sittings of an abdominal complaint, which had existed for three years, and which had resisted every

form of medical treatment, I beg to tender you my heart-felt thanks, and recommend you most highly as a conscientious and able magnetopathist to all suffering from similar maladies.

Yours, etc.,

Mrs. *A. J.*

Dresden.

Magnetism. (Meningitis.) Treatment.—The operator places himself behind the patient, and lays his crossed hands for about ten minutes on the neck, afterward making a hundred magnetic passes downward—the treatment to be repeated in an hour. Should no improvement be manifested after two operations, another remedy should be tried. See also pp. 908, 910.

Four years ago my son, now seven years old, was cured of meningitis by a magnetizer.

Düsseldorf (Louisen Strasse 124). *Fr. van Dyk.*

I herewith heartily thank Mr. *T.*, magnetopathist, Stern Strasse 20 a, for the highly successful cures effected on various members of my family. I will mention some special cases. Three years ago my son suffered from violent rheumatism in the joints. The violent pains subsided after the first magnetic application from Mr. *T.*, and after five sittings my son was completely cured of his disease. Two years ago my son got an attack of St. Vitus's dance which rapidly reached an advanced stage. He was entirely restored in nine sittings. A short time ago my son was laid up with diphtheria and was cured in two sittings. I recommend these cases to the attention of all sufferers.

Düsseldorf (Cornelius Strasse). *I. von Dick.*

Magnetism. (Neck, Stiff.)

To Mr. *R.*, Magnetopath.

Dear Sir:—

I have to thank you that I am now at last delivered from my intolerable pains in the head and neck, from which I had suffered for many years, and which had resisted every other remedy. May many people suffering from similar complaints, find relief in the power of magnetism, so successfully applied by you.

—— (Brücken Allee 36). *Dr. Müller.*

Magnetism. (Nervousness, Nervous Debility.) Treatment.—Passes from the head over the whole body as far as the loins. No general rule can be given in these cases. See also pp. 908, 910.

I suffered for ten years from extreme nervousness, together with violent vomiting. Other symptoms were: partial face-ache, troublesome congestions and trembling in the hands, depressed state of mind, fits of vertigo, affecting my mental powers. I consulted every specialist in Vienna and tried both allopathy and homœopathy without getting relief; even a course of treatment at Marienbad had only a temporary effect. Electricity and the cold water cure aggravated my condition. The iron waters of Moedling had a fearfully irritating and fatiguing effect upon me. Other health-resorts proved totally ineffectual. In January I went to live in Dresden, and went through an allopathic treatment, the consequence of which was a violent chronic gastric catarrh, without bringing any alleviation. Spasms preceded a general paralysis, so that I was unable to turn, walk or kneel without assistance. Treatment by magnetism was recommended to me as affording a chance of recovery, and I adopted it all the more readily, as I heard of several cases in which the use of bio-magnetism had led to restored health. Full of hope, I applied to Professor *Hofrichter*, and the immediate result of the treatment was relief, and afterward continual, steady improvement. To-day, after a six weeks' course, I am, thanks to Professor *Hofrichter's* exertions, completely freed from my nervousness, megrim, partial face-ache, spasms, vertigo and congestions. Also my excessive corpulence, I am happy to say, has been reduced by this treatment. Full of deep gratitude to Professor *Hofrichter*, I feel it my duty to recommend this method to all who are afflicted with the above-named diseases, but more particularly to all women, part of whose existence is embittered by the torments of megrim. I am ready to give any further information as to this beneficent system of cure.

Mrs. *M. Hofmann-Koenig*,
Dresden, Strehlener Strasse 56.

I was a sufferer for many years from great nervousness, which often reached such a pitch that I was afraid to make the least exertion. After a prolonged course of treatment by Mr. *R.*, I entirely recovered my health and strength, for which I herewith tender my hearty thanks to him.

Lonny von Versen.

Magnetism. (Neuralgia.) Treatment as for "RHEUMATISM."

Dear Sir:—

I hope you will pardon me for having so long delayed giving you the information you asked for with respect to the result of the treatment. An attack of articular rheumatism had left behind it a liability to violent nervous pains in the back and in the parts that had been affected. My

attention having been drawn to your mode of treatment with its absolutely marvelous results, I underwent a course of magnetism in your institution at Dresden, Chemnitzer Strasse 18. I had previously in vain tried massage, electric baths, and electricity applied by the most eminent authorities. Nothing had any effect; my malady was too obstinate. Full of doubt and distrust in a treatment of the effects of which science has never taught us anything, I put myself in your hands. After the first sitting I was fully convinced that I could be cured, since the benefit accruing to me from the magnetic sleep, which ensued at once, was the best guarantee that my nerves were capable of being permanently calmed. After barely a fortnight's treatment by magnetism,—a treatment so simple that even now I cannot help marveling at it—I have entirely recovered from my trouble of many years' standing, and I feel better to-day than I ever did. Everybody is struck with my fresh appearance, I am rid of the unbearable pains in my back and feel considerably stronger in mind and body. With feelings of deep gratitude I send you this true and conscientious account of my remarkable cure.

I remain, dear sir, yours truly,

Martha Freude,
Berlin, Breslauer Strasse 31.

I suffered for eleven years from neuralgia and paralysis in the right arm. The nervous pains were often so severe that I fell into convulsions. Doctors could give me no relief. For nearly a year I was treated with electricity by a famous specialist in nervous diseases. Not feeling any improvement, I at last tried magnetism. After twelve sittings the neuralgia and paralysis had disappeared and I have not had an attack for more than a month. My daughter has also been cured of acute inflammation of the lungs by the same magnetizer in six sittings.

Breslau. *Rosina Heimlich.*

Last spring I suffered from intense nervous pains in the right knee, which did not leave me day or night, and deprived me of all power of motion. Seeing that no remedy had any effect, I determined to try the magnetic treatment of Mr. *K.* in Breslau. The result was remarkable. I certainly felt no diminution of the pain after the first two sittings, but it vanished for several hours after the third sitting, and after the eighth sitting it had not only entirely disappeared but I had recovered my former power of motion. For six months I have had no return of the pain.

von Zawadzky.

Jürtsch, near Canth.

I feel it my duty to make a public expression of thanks to Mr. *K.* for the rapid cure of my wife from a serious illness, and hope hereby to render a service to suffering humanity by drawing their attention to the wonderful healing effects of magnetism. My wife was attacked last January by the most terrible neuralgic pains in the limbs. For fully fourteen days and nights she endured the most fearful agony, not being able to spend a single hour in bed. Every medical treatment proved useless. In my despair and on the advice of some friends, who had had some experience of the curative effects of magnetism in various diseases, I applied to Mr. *K.*, the magnetizer. After the very first application, on the ninth of February, a marked improvement showed itself. The patient was able to get two and a half hours' sleep in her bed the first night. After eight more sittings she had completely recovered, could take walks, and in a short time resume her household work. Though I cannot explain of what bio-magnetism consists, I can most decidedly and conscientiously from my own experience confirm the wonderful curative effects of this mysterious power, which requires no pharmacy and no appliances to soar above all medical skill and science.

Breslau. *F. Müller.*

Mr. *Klaus*, of Leipzic, manufacturer, suffered from insomnia and nervous headache. The malady was cured in eight magnetic sittings.

Mr. *Henry Poehrer*, gardener, was attacked by violent neurasthenia, and the accompanying weakness was so great that the patient could not walk without a stick. In addition, he was troubled for six months with cold feet. In a comparatively short time Mr. *P.* derived such benefit from magnetic treatment that he was able to go long distances without a stick and resume the duties of his calling.

Mrs. *Eckstein,* a lady of advanced age, suffered from general nervous weakness, sleeplessness, palpitation of the heart and great exhaustion. At her age she scarcely hoped for an improvement, but tried the treatment as an experiment. The result was a brilliant success. Mrs. *E.* feels well and cheerful, the heart beats normally, she sleeps well, and her strength has so much increased that she now walks to Plagwitz and Stötteritz, whereas at the beginning of her course she had to drive to the magnetopathist *P. Sch.*, Leipzic, about ten minutes' distance. Her eyesight is much improved, and she can now read without the aid of spectacles, which she could not do before undergoing the treatment.

Magnetism. (Paralysis.) TREATMENT.—Paralysis in consequence of a paralytic stroke is not at all adapted for magnetic treatment. The finger tips (right hand on the left side and *vice versa*) are placed for five or ten minutes on the nape of the neck and about fifty passes made over the arm and back down to the toes. The treatment to be repeated daily or twice a week. Paralysis of the eyelids is treated by holding the finger tips before them (right hand on the left side and *vice versa*) five minutes daily. See also pp. 908, 910.

My son *Richard* was paralyzed in his right leg for nearly two years, and could only crawl about the floor, or had to be carried. I tried doctors of good repute in vain. In the hospital I received the melancholy announcement that the leg could never be healed, and that the boy would never be able to use it. After having had the child treated by electricity for six months with no greater success, the magnetopathist, Mr. *R.*, Dresden, Marschallstrasse 34, at last succeeded in removing the paralysis in the leg in a surprisingly short time and with such thoroughness that the boy, to the astonishment of everybody, can not only walk, but jump about, for which remarkable result I make this public expression of my hearty thanks to Mr. *R.* Further information can be procured from my sister, Mrs. *Hänsel*, Dresden, Kiefern Strasse 6, where the boy also lives.

Dresden, 1897, Oppel Strasse. Mrs. *Bertha Miersch.*

My niece, *Henrietta Thömmers*, at present seventeen years old, had a paralytic stroke in her eleventh year on the right side of her body. A year ago, after the disease had existed for five years, with no benefit from any treatment, my niece was cured in about sixty sittings by a magnetopathist.

Hermann Theven.

Düsseldorf, July 18, 1894.

The undersigned has much pleasure in expressing her cordial thanks to Mrs. *E. O.*, magnetizer, Meissen, Burg Strasse 7, for having, with God's help, cured her son, after twenty-nine applications, of severe nervous paralysis. The disease originated in a previous attack of diphtheria, which was the cause of the weakness in the eyes as well as the paralysis in the body. The improvement manifested itself shortly after every sitting, and my son is now in complete health, and able to resume his calling.

E. Hornemann.

Domselwitz, Sept., 1897.

Magnetism. (Parturition, Eclampsia and Convulsions in.) TREATMENT.—As in "ANÆMIA."

My daughter *Elise* was attacked after her confinement with the most fearful eclampsia, and complete paralysis of the head and right part of her body set in. The hope of preserving her life had already been abandoned on all sides, when the magnetopathist, Professor *Hofrichter*, succeeded, after infinite pains, in removing this severe illness within a short time. I feel impelled to publicly express my deep gratitude to him for this.

Johanna Danhardt.

Dresden, 13 Wachsbleichgasse.

Magnetism. (Peritonitis.) TREATMENT.—The hands are placed open on the abdomen from ten to fifteen minutes (right hand on the left side and *vice versa*) and compresses with magnetized water applied. Treatment to be repeated twice a day. In view of the dangerous character of this disease it is advisable to call in a professional magnetizer. See also pp. 908, 910.

My son, aged fifteen, was seriously ill with peritonitis, which was confirmed by the doctor whom we called in. After a week—the boy had screamed night and day in consequence of the continual violent pains for the last hundred and two hours—the second doctor whom we consulted told us to be prepared for the worst; he could give no other remedies than those his colleague had given. Then in our great distress we applied to a magnetopathist, Mr. *T*. After the first application the pains immediately subsided, and with the continuation of the treatment the improvement was maintained. At the present moment, after a course of ten days, all danger may be considered at an end, and for the sake of other sufferers we consider it our duty to make this public expression of our feeling of recognition and gratitude to Mr. *T.*, who has saved our son for us.

Jos. Wierich.

Düsseldorf, Neusser Strasse 115, November 23, 1897.

Magnetism. (Phlebitis.) TREATMENT.—The hands are held for ten minutes over the inflamed parts (right hand on the left side and *vice versa*) and then slow passes made. Treatment to be repeated every day, or every second day, should the patient feel fatigued. See also pp. 908, 910.

I had been compelled to keep to my bed for four weeks in great pain, in consequence of an attack of phlebitis in the legs. The rubbings prescribed by the doctors were powerless to relieve the pain or cure the disease. Encouraged by the reports of successful cures effected by a magnetopathist in some families known to me, I put myself under his treatment with complete confidence, and he has cured me from my trouble-

some complaint in a short time without medicine. I gladly express my thanks to this gentleman, and recommend all who suffer from the same complaint to have recourse confidently to the same treatment.

Berlin. *Charlotte Thalwitzer*

Mr. *Seiffert* suffered from a painful attack af phlebitis. Having tried various remedies without success, he heard through a gentleman of the successful cures of a magnetizer, and put himself in his hands, with the result that he was soon restored to health and enabled to resume his occupation.

Magnetism. (Phthisis, Pulmonary Consumption.) TREATMENT.—This disease can only be cured by magnetic treatment if it has not reached the last stage, and the strength of the patient is not yet exhausted. The treatment is the same as in "INFLAMMATION OF THE LUNGS." See also pp. 908, 910.

After a local doctor, who had treated my wife for consumption, had pronounced her incurable, I applied in my distress to the magnetopathist, Mr. *T.*, having often heard of the success of his treatment in similar cases. Mr. *T.* succeeded in curing my wife after a course of treatment lasting four weeks. The doctor who had given my wife up has himself acknowledged the cure with astonishment. In giving public testimony to the success of Mr. *T.'s* treatment of this case, I at the same time tender my sincere thanks to that gentleman.

Düsseldorf, March 21, 1898. *Carl Höffken.*
Collenbach Strasse.

Three months ago the doctor pronounced my wife to be suffering from pulmonary consumption, and informed me and my wife's sister that there was no hope of her being cured, in consequence of which she had the sacrament for the dying administered to her. As a last resource, however, I applied to the magnetopathist, Mr. *T.*, and after a two month's course of treatment I am now, to my great joy, thanks to Mr. *T.*, in a position to state publicly that my wife has been medically certified to be restored to health. *Matthias Heuser.*

Düsseldorf, November 20, 1897.

Magnetism. (Pleurisy.) TREATMENT as in "PERITONITIS."

I had been a sufferer from pleuritis, which lasted for three months and left serious after-effects. I coughed continually and felt very weak; my lung was also affected, and the slightest extra-exertion reduced my

strength still further. In the autumn of this year my condition was unbearable. My cough was attended with spitting of blood. I felt a throbbing near the pit of the heart, I was also troubled with vertigo; no remedy did me any good and I had to give up my work at the end of October. Being advised to try treatment by magnetism, I consulted the magnetopathist, Mr. *Hofrichter*, who was willing to take me under his treatment. After the first sittings I was able to sleep in the afternoon; my head felt sleepy and my legs tired, and I had a nervous twitching in my left side. Respiration got easier after the third sitting; even after the first I spat no more blood. The deadly pallor of my face has changed, my bodily strength has visibly increased; I no longer suffer from cold hands and feet and my general health is excellent.

August Rumpolt, Dresden, Prager Strasse 7.

Magnetism. (Polypus in the Nose.) TREATMENT.—Two or three fingers are held for five or ten minutes in front of the nostrils of the patient (right hand on the left side and *vice versa*), who then takes from thirty to fifty deep breaths, drawing the air through the nose and expelling it through the mouth. To be repeated daily or two or three times a week.

I hereby express my thanks to the magnetizer, Mr. *K.*, for the benefit I have derived from his treatment. Having suffered for seven years from polypus in the nose, I had been during that time treated by several famous doctors and had undergone some painful operations. The polypus, however, always grew again and caused great difficulty in breathing, in addition to violent pains in the head and neck, giddiness, nervousness, insomnia and other troubles. At last, about fourteen days ago, I applied to Mr. *K.* Immediately after the first sitting I was able to breathe quite freely through both nostrils, and my pains and other troubles have now entirely ceased. I will gladly give further verbal information.

Düsseldorf. . *Jechen.*

My daughter *Wilhelmine* had suffered from the close of the year 1895 from polypus in the nose. An operation which she went through in May, 1896, was unsuccessful. Having had my attention drawn to the effects of magnetic treatment, I put my daughter under the treatment of the magnetopath, Mr. *H.*, in Essen, who cured her of her complaint in six sittings. The treatment took place shortly before Christmas, 1896, and up to this day there has been no sign of a recurrence of the trouble, so that I regard my daughter as completely cured. I hereby express my thanks to Mr. *H.* for the cure. *August von Hof.*

Hessin, April 5, 1897.

Magnetism. (Rickets.) TREATMENT.—Place the child on its stomach in the lap of a second person, and make slow passes from the head to the anus (right hand on the left side and *vice versa,* consequently crossed in this case), down the whole back, bringing the hands in a circle to the top again after each pass. The treatment should be repeated once or twice a week for ten minutes at a time. Hot baths must be avoided and as much milk drunk as possible. If the legs are very crooked they must be specially treated in accordance with the directions given in the principal article (see Rickets). This treatment must not be applied before the age of ten or twelve months. Bathing the back for one minute every day with tepid water, and without friction, will aid the treatment, which will nearly always be crowned with success in this complaint.

Two years ago my child, aged two years and a half (a seven months' child), was pronounced by Dr. *von Kühlwetter* to be suffering from rickets. Up to this time the child had been weak, nervous and ill-developed, and also subject to eruptions. After a magnetic course (ten sittings) it was completely restored to health, and is now well-developed and free from eruption. For eight years it has remained well and strong. Mrs. *Molle.*

Düsseldorf, Gerresheimer Strasse 97.

Two years and a half ago my child, aged six months, suffered from pain in the limbs and rickets, and was restored to health after eight applications. It has remained in good health to this day.

Düsseldorf, Hohe Strasse 15. *W. Lindemann.*

Magnetism. (Rheumatism.) TREATMENT.—The hands are held (right hand on the left side and *vice versa*) over the painful parts for from five to ten minutes and downward passes made. The treatment may be applied daily or every other day if the patient finds it too exhausting. See also pp. 908, 910.

In consequence of obstinate rheumatism I was unable to use a limb but recovered completely after eleven applications of magnetism. I gratefully acknowledge my indebtedness to the magnetopathist who treated me, and shall be glad to give any required information to people suffering from the same malady. *Wilhelm Gräbler.*

I suffered from rheumatism so badly that all my limbs were useless. Mr. *O.*, magnetopathist, being recommended to me, I sent for him late

as it was. After the first application of magnetism I was able to walk about the room again and was completely cured in six sittings. I recommend Mr. *O.* to all suffering from rheumatism.

H. Oertel, Chemnitz.

I gratefully acknowledge my indebtedness to Mr. *K.*, magnetopathist, for having cured me of rheumatism from which I had suffered for three years. In spite of a course of waters at a mineral bath, I was entirely lame and confined to bed for six months, and death stared me in the face. In this wretched condition I was removed to Breslau, where I underwent a month's treatment with magnetism which completely cured me. Under these circumstances I feel it my duty to warmly recommend this mild magnetic treatment to suffering humanity, more especially as it caused me neither pain nor excitement.

Jarischau, near Striegau. *Hedwig Quander.*

Signed before me, *Henschel,* Parish Officer.

After having suffered from rheumatism in every part of my body and tried mineral baths and various medical treatments in vain, Dr. *v. Stuckrad*, Surgeon-General, recommended me to apply to Mr. *R.*, magnetizer. His treatment has completely cured me, and I hereby publicly express my thanks to him for his kindness.

Wernersborg, Sweden. *Dagmar Koch.*

I willingly and gratefully testify that your treatment by magnetism has freed me in a very few days from my very painful rheumatism which caused a very prominent swelling on the left side of my face. I further testify that the treatment was not only perfectly painless but procured me instant relief. In consequence of the natural sleep which ensues I can heartily recommend this mode of treatment to all suffering from similar complaints.

Thekla Teubner,

Dresden, 25 Marschall Strasse. Postmaster's widow.

Magnetism. (Rheumatism, Articular.) TREATMENT.—The hands are laid open on the tender places for five minutes (right hand on the left side and *vice versa*) and a hundred slow passes made downward and away from the body. Treatment to be repeated daily. All heating drinks to be avoided.

My daughter, aged eleven years, had suffered from articular rheumatism from the time when she began to go to school at the age of seven years. The pains had got so much worse that the child had to suffer agonies, and could not bear to be touched, still less carried. Medical

treatment proved useless, and after a year a heart trouble was added to the already serious disease. Being anxious about the child's life, we consulted the magnetopath, Mr. *H.*, in Essen, who, in the course of about sixteen weeks, completely cured it. A substantial improvement set in after the second sitting, which was all the more surprising as the child had been in bed for fifteen weeks before commencing the treatment. It may readily be believed that, on account of this disease, the child was compelled to be absent from school for more than half the time.

In the interest of sufferers we feel it our duty to make this statement, thanking Mr. *H.* at the same time most warmly for his treatment of the case. We may add that the child is still being treated once a week to ensure the permanency of the cure.

Beckhausen, near Buer, June 11, 1897. *Bernhard Posser.*

Six months ago I was cured by a magnetopath of severe articular rheumatism in five sittings. *Heinrich Romberg.*

Düsseldorf, December 8, 1890.

Two years ago my wife suffered from articular rheumatism. She could neither walk nor stand, and I had to feed her like a child. She had to be conveyed to Mr. *J.* in a carriage, and carried into the consulting room by two men. She was able to walk without assistance after the first sitting and was entirely cured after six visits, remaining in good health ever since. *Hermann Eymanns.*

Gerresheim (Vennhausen).

For about ten years I suffered from articular rheumatism. Six months ago I was cured after five magnetic sittings, and I have remained in good health to this day. *Theodor Pütter.*

Düsseldorf, January 19, 1891.

The undersigned herewith conveys her heartfelt thanks to the magnetopath, Mr. *R.*, 55 Marschall Strasse, Dresden, for the cure of her son from articular rheumatism and nervous spasms; thanks which are all the more sincere as no previous treatment was able even to relieve the patient. *Emilie Lische.*

Dresden, Freiberger Strasse, January 7, 1893.

Having suffered for more than a year from frequent attacks of a painful nervous disorder, combined with articular rheumatism, I owe my recovery solely to Mr. *R.*, magnetopath, 34 Marschall Strasse. I feel it my duty to recommend him to all sufferers.

Dresden, January, 1896. *Ernst Louis Heger.*

My son, aged four years, was taken ill last May with violent articular rheumatism, after having been frequently out of sorts during the winter. After the customary administration of salicyline, the complaint yielded for a short time, only to return with increased violence, accompanied with serious complications. In our anxiety we applied to the magnetopath, Mr. *R.* The pains disappeared after the first application almost entirely, and after the fifth sitting my son was completely restored to health, and up to this date there has been no return of the pain. I feel compelled to express my sincere thanks to Mr. *R.* for the astonishingly rapid cure of my son. *O. Gundlach,* Teacher.

Berlin, August 25, 1892.

Magnetism. (Sciatica.) Treatment.—Place the right hand on the left hip and *vice versa*, for five minutes, and make passes down to the toes. Treatment to be repeated daily, or only every second day if the patient feels exhausted. See also pp. 908, 910.

I have been waiting for some length of time before tendering you my best thanks for the successful treatment by magnetism which I underwent with you, the only reason being that I did not wish to anticipate: in other words, I wished to have the full proof that the cure was a permanent one. I thank you from the bottom of my heart for your exertions. Not the faintest sign of my long and painful disease (sciatica) has ever returned, my hip is free and has quite regained its former pliability. With kind regards, yours truly,

Dresden, Kurfürsten Strasse 26, I. Dr. *L. Bregha.*

Berlin, December 24, 1895.

Next to God I have to thank you, dear Mr. *R.*, a thousand times for having cured me in less than three weeks of sciatica complicated with phlebitis. I sincerely wish that all sufferers would make a trial of your wonderful powers.

Natalie von Grünhof,
Widow of Duke *Ernest of Wurtemberg.*

Magnetism. (Scrofula.) Treatment.—Passes to be made daily over the whole body from head to foot.

From my seventh year I had suffered intermittently from scrofula, employing for it every remedy prescribed by doctors, but without success. The disease was suddenly arrested in the eighteenth year of my life, but

only to break out again last year with redoubled violence. Medical help being useless, I made up my mind at last—after hesitating for some months—to put myself under magnetic treatment. By this time the tonsil, which had got to the size of a fist and was hanging down like a sack, had become quite hard, and incommoded me in bed, and I had no prospect of getting rid of it, except by an operation. The result was as surprising, as it was unexpected. After a week the tonsil softened, the lassitude in my body decreased, and I gained strength. After a month the tonsils could easily be moved, the surrounding parts having long become relaxed. So great was the improvement which set in, seconded as it was by an appropriate vegetarian diet, that I was, after a five-months' treatment, completely relieved from my many years' sufferings. Thus restored to health, I can offer my heartfelt thanks to Professor *Hofrichter* for the unremitting pains which he took with me. In grateful acknowledgment,

Lina Koenig.

Dresden, Zöllner Strasse 33.

Dear Mr. *Blechinger*:—

For a long time I have wished to write to you. *Ernst* looks very well, and has increased in weight since he commenced your treatment. He weighed twenty-five pounds and three-quarters on July 25th, that was shortly before the treatment commenced; twenty-six pounds and three-quarters on August 25th, and twenty-seven pounds and a half on September 25th. The skin of his face was never so soft and delicate as it is now. It was nearly always rough and cracked, particularly with the advent of the cold season. The sore places on his nose and ear grow daily smaller; I continue, of course, to observe your injunctions.

As they have stood *Ernst* in such good stead, might I ask you to kindly give me your advice as to my youngest son, now aged nine months.

Memel, October 2, 1891. *Johanna Scharfetter.*

Magnetism. (Shingles.) TREATMENT.—The hands must be held open over the affected parts for ten minutes (right hand over the left side and *vice versa*). The inflammation will generally subside in this time. To be followed by passes. This treatment should be repeated once or twice a day.

I was suffering from shingles, which my doctor could not cure, the pain being so violent that I threw myself about on the ground. Large boils formed on my body. I then consulted a magnetizer, who relieved me of my pain after a few applications. Eight days later the boils had also disappeared.

Düsseldorf. *Jos. Klimm*, Plumber.

Magnetism. (Skin Diseases.) TREATMENT.—The affected places are treated by holding the open hands over them for about five minutes (the right hand over the left side and *vice versa*), and then making about one hundred passes. The treatment may be repeated daily. Compresses with magnetized water should also be applied to the affected parts. See also pp. 908 and 910.

In his first year, and immediately after being vaccinated, my grandson, *Georg Vogelfänger*, suffered from a very painful skin disease and had numbers of boils all over his body. No doctor was able to cure him or even to procure relief. On account of this skin disease the boy was not allowed to attend school up to his eighth year, and still suffered from it when sent to school. In his ninth year I took him to a magnetopathist who magnetized him for some time with magnetic passes, and from that day to this——it is a year since—not a vestige of the skin disease has remained. I am prepared to give verbal information at any time.

Cologne, December 1, 1897. *M. Willach*, widow.

Magnetism. (Sleeplessness. Insomnia.) TREATMENT.—The head is first held between the hands (right hand on the left side and *vice versa*) and then slow regular passes made, to be repeated daily.

I had been suffering from insomnia for years, culminating in general loss of strength. Under these circumstances other diseases, such as rheumatism in the arms and hands, soles of the feet and joints, appeared in a pronounced form, and by these I was afflicted with scarcely any interruption for upward of ten years. By Professor *Hofrichter's* manipulations natural sleep was brought about after the first sitting without the help of magnetic sleep. Within a week my sleep was tolerably regular, though only of short duration, but the pains, which had lasted for years, materially diminished. I had a sensation within me as of a flowing tide. I felt, when I lay in bed at night, half-awake, as though I must fly. The result of the natural sleep which I enjoyed was, of course, access of strength, and after a few weeks that condition became so habitual with me that I now enjoy a healthy, natural sleep, and cannot find words adequately to express my satisfaction at the relief I have found by the application of animal magnetism.

Niederlössnitz, Grenz Strasse 27. Mrs. *R. Lasche*.

Magnetism. (Spasms or Cramp.) TREATMENT.—Spasms are easily curable by magnetic treatment. The right side is treated with the left

hand, and *vice versa,* the hands being laid for five minutes on the neck, and then about fifty slow passes made from the head to the toes. Treatment, twice or three times a week. With cramps in the stomach, the finger tips of both hands are placed for about three minutes on the stomach, and then circular passes made (about ten times). Treatment also daily, or two or three times a week. Every mother has sufficient magnetic force to relieve cramp in her child during the first year of its life.

My wife, aged twenty-three years, was suddenly seized with violent cramp last November. These attacks were repeated every day and night for seven or eight weeks. Sometimes she had ten or twelve attacks in one day. They lasted from a quarter of an hour to an hour and a half. These attacks were sometimes followed by a state of temporary madness, during which she would foam at the mouth. Sometimes she would lie for over half an hour in a cataleptic condition, with her limbs hard and stiff like wood. It was a terrible state of things which apparently death only could relieve. The last sacraments were administered to her. The chaplain, who performed this office, had to remain two hours with her, as she got four attacks during this time. The clergyman was filled with pity, and told me that he had never in his life seen such terrible attacks. As a final resource, her mother took her on the 28th of December to Mr. *K.*, a magnetopath in Cologne (Hansa-Ring 34). When the latter placed his hands on her, a new life seemed to flow through her, and a wonderful change set in. From this moment she was free from the spasms which had so terribly tormented her day and night for two months. My wife's illness had aroused an unusual degree of sympathy in large circles, and the interest in her case has not abated since her unhoped-for recovery. The gratitude which our family owes to Mr. *K.*, is too deep to express it by words. I am glad to mention in conclusion that the chaplain, for the sake of other sufferers, announced this cure, effected by the simple laying-on of hands, from the pulpit.

Cologne-Deutz, February 18, 1895. *A. Kramer.*

My daughter, aged fifteen years, was taken ill a year ago, and eleven doctors, whom I consulted during that time, declared that they could not tell what the disease was. The child got dreadful attacks of cramp, and was during the last few weeks unable to swallow any food. Our doctor in Kronenberg thought she would die of hunger and that there was no hope for her. The other doctors shared this opinion, and said they could suggest no remedy, except to go to Bonn for an operation. Four months ago we heard of the successful cures of the magnetopath Mr.

TREATMENT.—The right hand is placed in the midriff and the finger tips of the left hand on the neck for ten minutes. Treatment to be repeated daily.

Ten years ago my son, then eleven years old, was cured of nervous stammering, from which he had suffered long, in twelve sittings by a magnetopath.

Düsseldorf (Kasernen-Strasse 53), May 10, 1896.

Lebrecht Grigo.

Magnetism. (Stomach, Diseases of the.—Inflammation, Ulceration, Cancer.) TREATMENT.—The operator places the finger tips of both hands for about five minutes on the region of the stomach, and ascertains from the patient whether he feels a sensation of cold or warmth in the stomach, and how that sensation varies with further treatment. In cases of inflammation and ulceration the patient will always have a feeling of coolness, which will diminish and be replaced by a feeling of warmth as the cure progresses. In nervous affections of the stomach the sensation is always one of warmth. The treatment may be repeated every day, or three or four times a week. Magnetized water for drinking is advisable.

My son *Johann Motz* had suffered for some years, according to the doctor, from ulceration of the stomach, which had latterly got so much worse that he became incapable of any work. All remedies proved futile. On the 30th of September my son consulted the magnetopathist Mr. *H.* in Essen, and I have much pleasure in informing that gentleman that my son has been fully restored to health after nine visits, for which I herewith express my best thanks.

Heisingen, November 20, 1897. *Conrad Motz.*

I owe to Professor *Hofrichter* in Dresden my perfect recovery from a tedious inflammation of the stomach, resulting in complete loss of appetite and want of adequate sleep which was in consequence of violent, though intermittent headache. I became partially deaf, and my fingers were continually cold. Eight applications of magnetism, with copious draughts of magnetized water, sufficed to permanently restore my health within a fortnight.

Kaitz, near Dresden. *Gustav Hentschel.*

For many years my wife suffered from vomiting of blood, due—in the opinion of the doctor who attended her—to the presence of an ulcer in the stomach. She was cured by the magnetopathist Mr. *T.* in two applications, a fact which I gratefully acknowledge.

Gelsenkirchen. *Leonhard Mathei.*

Public Acknowledgment!

My best thanks herewith to Mr. *R.* for the cure of my wife who had been afflicted for a long time with a serious disease of the stomach, by means of magnetism. The treatment lasted about four months, previous to which the patient had been very ill in bed for five months, all hope of recovery having been abandoned. *August Bachmann.*

The contents of this copy have been verified by the parish-inspector. The above is certified to be a true copy.

Parish Naundorf-Grossenhain. *Rossberg.*

For many years I had suffered the most terrible pains in the head and stomach, from which I was completely delivered after twenty applications of magnetism. The treatment also had a good effect on my unhealthy complexion. I herewith express my hearty thanks to Mr. *R.* for his rapid help.

Stettin (Moltke Strasse 13). *Alwine Hoffmann.*

Mrs. *Dehm* had been troubled for many years with a weakness in the stomach, attended with violent pain. All the remedies applied were of no use, and her digestion grew steadily worse. Mr. *P. Sch.*, magnetopathist of Leipsic, succeeded in freeing the lady from her old trouble, and she was finally able to enjoy, without any bad after-effects, food of such kind which she would have found impossible to digest before.

Magnetism. (Syphilis.) TREATMENT.—The whole body must be treated in these cases (the right side with the left hand and *vice versa*), especially the sexual organs if still affected. Treatment to be repeated daily.

I hereby certify that I was cured of syphilis in a little over two months by Mr. *R.*, a magnetopathist of Berlin. This was confirmed by an allopathic doctor. I have not gone through a course of allopathic treatment. When I commenced the treatment under Mr. *R.*, the secondary symptoms had already appeared. Even tertiary symptoms (swellings on the bones) had begun to show themselves. The declaration of the allopathic doctor referred to above is officially attested.

Neukirchen, June 26, 1895. *Friedrich Schmidt.*

For two years I had suffered from the consequences of syphilis. The sequelae of this disease included constipation, loss of appetite, bad sleep, and running at the eyes. My eyesight was materially impaired, my hearing was bad, and I was troubled with salivation, cough and hoarseness. I had six doctors, none of them could help me. At last I tried treatment with magnetism. The discharges and swellings subsided, the pain in

passing water disappeared, I slept better, could digest better, and salivation ceased altogether. Animal magnetism and vegetarian diet have saved me. With grateful esteem, yours truly,

Dresden. *G. L.*

Magnetism. (Tic Douloureux.) TREATMENT—As in "RHEUMATISM."

Day and night for a whole year I had been tortured by an indescribable violent face-ache. The fact of my being in my hundredth year made these pains all the more difficult to endure. The nervous pain rendered mastication and even speaking almost impossible and caused me to moan almost incessantly. Doctors could do nothing for me. On the morning of March 15th, I was driven to Mr. *K.*, a magnetopathist, residing at 74 Kaiser Wilhelm Strasse. By passing his hand over my face a few times, he procured me instant relief. While ascending the stairs on arriving home, I said to my attendant, "I feel as though I had been rejuvenated." The magnetopathist said, several more applications would be necessary, but I was at once freed from pain, and was able to sleep again for the first time since the face-ache began.

Breslau (26 Matthias Strasse). *Sophie Schön.*

I was a witness of the above-described cure of my aged friend and neighbor, the hundred-year-old *Sophie Schön.*

Dorothea Hentschel.

Magnetism. (Trembling, Nervous.) TREATMENT—To be applied to the whole body, beginning at the back of the head, passes being made over the back, down to the feet, and over the arms.

On the 10th of July, 1882, I was seized with a nervous complaint, a violent trembling over the whole body, for which no doctor, no change of air nor any watering place could do the slightest good. Even when sitting down, the soles of my feet would keep tapping on the ground. After the first magnetic application, at the end of August, the trembling disappeared for twenty-four hours, but returned again. After the fourth sitting I was able to go up the steps without help, and gradually the serious illness yielded. The burning heat and violent perspiration completely disappeared. During the disease I had a feeling as if all the internal organs were in a constant state of tremor. This sensation, however, ceased as soon as the magnetizer placed his fingers on the pit of the stomach. Since last December I have been in perfect health and have entirely recovered from my pitiable condition, a fact which can be attested

by over a hundred witnesses who are constant frequenters of the Stock Exchange and are personally acquainted with me.

Breslau. *A. Seipelt.*

Magnetism. (Tumor.) TREATMENT—See "GLANDULAR SWELLING."

Miss *Worlitz* suffered from a large tumor on the right shin-bone. The patient felt the magnetic influence through her whole body. She was cured after several applications of magnetism by Mr. *P. Sch.*

Magnetism. (Typhus.) TREATMENT.—The whole body must be treated (the right side with the left hand and *vice versa*). The open hands are placed on the back of the head and held there a minute, then carried over the back to the front of the body, allowed to rest over the stomach, and conducted off in the direction of the feet. About three minutes' time should be allowed for each pass thus carried out. Five such passes are the rule for one sitting. If, after two or three applications, no improvement is manifested, another remedy must be tried. The treatment should be repeated twice or thrice a day.

On the 13th of October, 1878, my son, aged twelve years, was taken ill in consequence of a chill. On the morning of the 14th of October, after a restless night, the symptoms appeared which are considered by medical authorities to be premonitory of typhus; *viz.*, increased temperature, especially in the head, and swelling of the spleen (the latter not very pronounced as yet). My son lay in bed—apathetic and dull-eyed. The temperature mounted to close on 33° R. I did not wait for the third symptom, diarrhœa, but seeing the possibility of an unfavorable issue, I applied at once to a magnetopathist of this town, Mr. *K.*, who appeared at my son's bedside at three o'clock that same afternoon. The success of his first treatment, given in the presence of witnesses and lasting five minutes, was surprising and striking. In a few minutes the heat and high color of the face, as well as the clammy perspiration on the skin, had disappeared, and the heightened temperature had returned to within its normal limits. My son became cheerful, and declared at the close of the application that he was feeling quite comfortable. On the afternoon of the 15th, after another short application, the patient was able to leave his bed. On the 17th, he went out, and on the 18th, he returned to school. As I may safely assume that this result was only attained by the same healing power, the efficacy of which so many sick people have experienced in themselves, I express for myself and on behalf of my family the most sincere thanks to Mr. *K.*

Munich. Dr. *Julius Oertel.*

Magnetism. (Ulcer.) TREATMENT.—The finger tips (right hand on the left side and *vice versa*) should be held for five minutes over the ulcer at a distance of about an inch from it, followed by passes in the air above it. Magnetized water is advisable for compresses. The treatment can be repeated daily.

Some time ago I had a finger cut off in the hospital at Wiesbaden. Afterward a malignant ulcer formed on my chin. In the course of the last two years it got worse and ate into the surrounding tissues. Dr. *Senfft* of this town said, in the presence of my housekeeper, that I should have to be operated on and have a piece of the jaw removed. I was in a terrible state of mind. A few days ago I had a magnetic application at Wiesbaden, and was given a bottle of ordinary drinking water which had been magnetized and which I used in making compresses. The effect was extraordinary. The malignant ulcer healed up visibly. And now, after a short time, the ulcer and all my pains have disappeared. Other persons, beside myself, including the mayor, have witnessed this marvelous result.

Vierstadt (Erbenheimer Chaussee). Mrs. *Anna Wagner*.

I, the undersigned, had suffered for about two months from malignant ulcers which had already begun to attack the bones.

I applied to a magnetopathist, and, to my great surprise and delight, I saw what I hardly ventured to hope for, the ulcers beginning to heal up after a few applications. The inflammation subsided, the ulcers rapidly and perceptibly vanished, and I am again well and cheerful, thanks to God and the magnetizer.

Berlin (Hasenheide 55), July 18, 1892. Mrs. *E. Gaebel*.

Magnetism. (Vagina Tendinum.) TREATMENT.—The finger tips are held for ten minutes over the diseased parts (right hand on the left side and *vice versa*), and then a few passes made over them in the air. Magnetized water is recommended for compresses, the water which has been magnetized negatively (with the left hand) being used for the right side of the body and *vice versa*. The treatment to be repeated daily.

Six months ago I had suffered for five months from vagina tendinum on the left hand, and was to be operated upon. Mr. *T.*, a magnetopathist, cured me in four applications.

Düsseldorf (Kölner Strasse 171). Mrs. *Schulz*.

Magnetism. (St. Vitus's Dance.) TREATMENT.—The tips of the fingers are placed on the nape of the neck for about five minutes (right

hand on the left side and *vice versa*), and then from thirty to fifty passes made slowly over the back to the toes. The treatment to be repeated daily, or two or three times a week.

St. Vitus's dance, epilepsy, hysteria, and other nervous complaints which occur in the shape of spasms, are often looked upon as incurable. Magnetism, however, can be of great assistance, as the following cases will show:

Sir:—

Please forgive me for not having written to you before. To my great regret I have not been able to send you the articles in question, as *Wilhelmine's* father would not permit the use of his name, out of regard for his doctor. I can wish you nothing better than to make many such cures as you have succeeded in making in the case of *Wilhelmine*. She has been able to go through her confirmation in perfect health, a thing which her parents would never have ventured to hope for last spring. You may rest assured that I shall always speak up in favor of the reality of your power of healing, having been persuaded of it myself by such a brilliant example as *Wilhelmine's* cure.

Esch. *Stahl.*

(The girl had suffered for some years from St. Vitus's dance.)

My daughter, at present in her eleventh year, suffered from St. Vitus's dance. Dr. *von Kühlwetter* pronounced this to be her disease. She often had from ten to twelve attacks a day. A magnetopathist has cured my child in fourteen applications. *Franz Rohr.*

Düsseldorf.

Otto Frötschke had suffered since the 1st of December from a severe form of St. Vitus's dance. The patient writhed and trembled continually, his nervous activity was entirely suspended, and his language was quite unintelligible. The ordinary functions of the body also were suspended and the patient could neither stand nor walk. In this condition he was put under the treatment of the magnetopathist *Sch.* in Leipsic. The patient's condition improved at each visit, so that he is able now to stand and walk without assistance and to speak intelligibly, and his appetite, which was quite gone, is steadily improving.

The patient had suffered from the disease for a long time and everything had been tried for it, but it resisted every remedy. A few weeks after the cure was finished the doctor who had previously treated the little boy chanced to hear from his mother that he had been cured by magnetic treatment. His only answer was: "There is nothing in magnetism, anybody can do that." If that were so, would it not have been his duty to have made use of it in the treatment of his patient?

We herewith express our warmest thanks to Mrs. *Emmy O.*, magnetopathist, 7 Burg Strasse, Meissen, for the cure of our daughter *Gertrude*, who had suffered from St. Vitus's dance for a long time. A three months' course of treatment by Mrs. *O.* cured the malady after all other remedies had proved unsuccessful. We confidently recommend this method of treatment to all sufferers.

Meissen, 1897. *Paul Nitsche.*

My daughter *Louisa*, aged thirteen years, contracted St. Vitus's dance this spring, and I had in consequence to take her away from school. After having her treated in various ways without the slightest success, I at last consulted the magnetopathist, Mr. *R.* Immediately after the first sitting an improvement set in, and after the twentieth visit she was completely cured, so that at the beginning of the new year I was again able to send her to school. For this success I express my best thanks to Mr. *R.* *Amalie Lange.*

Nieder-Gorbitz, near Dresden.

That the result of the treatment was not merely transitory is proved by the fact that years have passed since the cure was completed without the smallest relapse having occurred.

My daughter was suffering from St. Vitus's dance. She had lost the power of speech, her limbs continually writhed and trembled. Her head fell from one side to the other. The poor girl could neither walk nor stand nor sit. I took her to a magnetopathist at Breslau. A great improvement was perceptible after the first application, and she was completely cured after thirteen sittings (the last took place on the 6th of July). I myself was cured of a long-continued deafness of the left ear by the same means. *F. W. Hierse.*

Bohrau, near Oels.

Out of gratitude and in the interest of sufferers from a similar complaint I desire to make the following case widely known. My son, aged eleven years, had been attacked with a pronounced form of St. Vitus's dance, with symptoms of epilepsy, in consequence of overwork and fright, and has been treated for three weeks with the best results by a magnetopathist in Breslau. Through the application of animal magnetism the terrible morbid condition was transformed into a refreshing magnetic sleep, which even after the completion of the cure and until the last few days took place regularly and at the same time every day. Having gone through a supplementary course in Ziegenhals, in Ferdinandbad, consisting of forest air and the use of cool baths, we may

now with God's help look forward to the boy's speedy and complete recovery. We can conscientiously recommend the magnetic system of treatment to all. *Seiffert.*

The boy was a highly sensitive subject. If a bottle of magnetized water were held over him in his sleep, his feet would be attracted to the bottle till his toes touched it. If a person took the bottle in his hand and walked backward, the boy would sit up in his bed in his sleep and follow the bottle with his firmly closed eyes in every direction through the whole room.

Magnetism. (Wounds.) TREATMENT.—The finger tips are placed over the wounds for five minutes at a distance of about half an inch (right hand on the left side and *vice versa*). Then passes should be made over them. Linen compresses with magnetized water can be recommended, water magnetized negatively (*i. e.*, with the left hand) being employed for the right side and *vice versa*.

In feeding a boiler I got a deep cut on the forefinger of the right hand. Not only did the medical remedies employed prove useless, but the inflammation kept spreading and the whole hand was swollen; I entirely lost the use of it and could not sleep for pain. It completely recovered after five applications of magnetism, and I can resume my duties; during each application the intolerable pains vanished after a few passes and I perspired over my whole body.

Adalbert Valint.

For twenty years I was troubled with open sores in the leg, which, in spite of various remedies, would not heal up. A magnetopathist cured me in twelve applications. *Heinrich Jüntgen.*
Hochdahl.

I suffered from several deep suppurating sores on a bald part of the scalp which caused me the most maddening pain. Two years ago I was urged to undergo an operation in the hospital, but fought shy of it. A relation, who had been cured of a long-standing complaint in the larynx by the magnetopathist, Mr. K., and knew of other cases of disease cured by the same man, advised me to try magnetism. As soon as the magnetizer held his hands over my head it was though a cool wind were blowing over the burning places, and all pain vanished at once. By the sixth sitting all the sores had healed and I am now able to go about without a bandage and show the scars to everyone. Many can testify to this remarkable and permanent cure.

Breslau. *Carl Maroske.*

For two and a half years I had a large suppurating wound on the ankle which caused me intense suffering. I tried magnetic treatment a month ago: since then the wound has healed and all pain vanished.

Bettlern, near Breslau. *Johanna Radzai.*

At the close of this chapter I would add the following observations.

The remarkable cures, which we have described in this chapter must be regarded as exceptional and possible of accomplishment only to professional magnetizers, who possess great magnetic power, who have the advantage of long experience and practice, and who are inspired with a sincere trust in Divine Providence and a steadfast desire to help their fellow creatures. It is, therefore, a matter of legitimate complaint that the large number of men and women who are gifted by nature with healing powers, and who might be able to use those powers for the benefit of suffering humanity, are not at present recognized and assisted, but on the contrary disregarded and even in a measure persecuted by the State.

In the full consciousness of the meaning of the words I am using, I take the liberty of summing up the case in the following declaration: "In the system of treatment by bio-magnetism probably lies the healing art of the future."

I may refer, in conclusion, to the article, "Magical Rays," by *Tormin* at the close of the chapter on "The Röntgen-Rays."

MADNESS WITH EXALTED VIEWS. This is not an independent disease, but a symptom of the initial stage of the incurable mental disease —softening of the brain—*dementia paralytica.* The specialist for mental diseases, Mr. *Becker*, writes on this subject: The patient, hitherto quiet and reserved, becomes over-talkative and merry and evinces in all his actions a more and more exaggerated estimation of his position and capabilities. He begins to form great plans and projects, rushes into enterprises totally absurd and anything but appropriate to his circumstances; he constructs and purchases things entirely useless to him and squanders his money and means in every imaginable way. Even at this stage his friends have often no idea of his real state of mind; they certainly perceive that he is somewhat excited and they ascribe it naturally to the great enterprises in which he has embarked. But the want of reason in his talk and in his actions becomes gradually more obvious and from a moral point of view he begins to display great laxity. He grows lascivious, loses his moral sense and exceeds the bounds of social decorum. He becomes untidy and careless in his dress as well as in his business; he forgets even the most important things, mislays or loses valuable documents, and so on, and by such negligence brings upon

himself a thousand unpleasant consequences of which, however, he takes little heed, having lost his mental balance. Frequent fancied apparitions of God and other similar visions cause his excitement and madness to grow apace and presently to assume the shape of the imaginary acquisition of immense wealth, of having become a prince, king or emperor, nay, a god, or even the supreme Deity. This stage is rapidly succeeded by complete idiocy, and the patient soon perishes from the total collapse of his vital power.

TREATMENT.—See "MENTAL DISEASES."

Malarial Fever, see "MALARIA" and "KNEIPP CURE."

MALARIA. INTERMITTENT FEVER. Ague. Two varieties of this disease are distinguished, the cold and the hot malarial fever, the former being met with in temperate, the latter in tropical countries.

SYMPTOMS OF COLD MALARIAL FEVER.—The outbreak of the disease is usually preceded by a feeling of general indisposition, with depression, headache, giddiness and loss of appetite, lasting for about a fortnight or three weeks. The disease begins with violent shivering, lasting from a few minutes to an hour. The countenance is pale and sunken, the skin corrugated, the breathing short, action of the heart and pulse feeble but accelerated; the teeth rattle, and then the whole body shivers and trembles. This shivering stage gradually subsides and is followed by alternations of heat and shivering; the body is hot and the rough skin again becomes smooth and red but remains dry. Violent headache and thirst are also present. This hot stage lasts from three to six hours and is followed by copious perspiration, and in another hour or two the patient is restored to health, the only remaining symptom of disease being a feeling of great exhaustion with perhaps some pain in the region of the spleen, liver or stomach.

An attack of this sort may last altogether from four to twelve hours. It recurs after an interval of twenty-four, forty-eight or seventy-two hours, the patient remaining free from illness during the interval. Cases have been known, however, in which two attacks have occurred within the space of twenty-four hours.

The spleen (and sometimes the liver) becomes swollen at every attack, and, if the disease be protracted, these organs always remain enlarged.

The severity of the symptoms increases with each succeeding attack.

SYMPTOMS OF HOT MALARIAL FEVER (sometimes known as pernicious ague).—This disease is generally met with in southern countries, but occasionally occurs in temperate regions.

The symptoms described above occur in an acute form (not, however, at the first, but, as a rule, at the third or fourth attack), but fresh

and dangerous complications supervene, such as copious evacuations of a choleraic nature, brain exhaustion through congestion of blood, severe inflammation of the lungs and pleura, extreme coldness of the skin, the latter feeling like marble to the touch.

The intervals between the attacks are very short in this form of the disease and are later on entirely absent; a condition resembling typhoid fever also supervenes, characterized by convulsions, confused speech, stupor, etc.

Causes of Malarial Fever.—Marshy districts, stagnant water, districts subject to frequent floods, but especially low-lying marshy ground and rivers, the disease germs or fungi formed in such places entering the system with the air or drinking water. These fungi find a suitable breeding ground in places where vegetable matter decomposes under the action of heat.

In districts where malarial fever is prevalent, it is especially dangerous to be on or near marshy ground in the evening or morning, or during the night, probably because the lower strata of the atmosphere are filled with these fungi when the temperature is low.

The liability to acquire the disease is increased by cold, disordered digestion, errors of diet, unhealthy mental conditions, etc.

The disease cannot be transmitted from one person to another, *i. e.*, it is not infectious.

Treatment.—Districts where malarial fever is reported to be prevalent must be quitted as soon as possible.

As soon as the patient shows symptoms of shivering, he should be well wrapped in blankets and covered with a feather-bed (see "Dry Packing"). When fever sets in, lukewarm (68° to 73°) three-quarter packs should be given (duration, half an hour or longer, according to the patient's comfort), followed by a wet rubbing (73°); the whole process to be repeated, in case the temperature continues to rise. When the fever subsides, several lukewarm baths (86° to 91°) may be given weekly. During the intervals of the disease, steam-baths in bed and massage should be given to increase the secretions; if this be done, the attacks will diminish in frequency and will soon entirely cease.

Another Treatment.—As soon as the shivering stage commences, a vigorous wet rubbing (73°) should be given, the patient being rubbed thoroughly dry immediately afterward, put to bed and well covered up or put in a dry pack; this process to be repeated, in case the shivering stage should recur. When the fever sets in, a rapid lukewarm bath (86°) should be given, the body, especially the feet and legs, being vigorously rubbed. When the fever reaches a stage of greater intensity, the patient

should, without being previously dried, be put into a whole or three-quarter pack (82°), the sheets being only slightly wrung out, or into a steam-bath in bed of short duration. The duration of the pack should be regulated by the feelings of the patient; when perspiration has been induced, a bath or wet rubbing should be given. Box steam-baths or hot-air baths are also applicable to these cases.

In addition to the treatment specified above, the patient, if of a strong constitution, should be put into a full pack every morning when possible, and left to perspire for three-quarters of an hour to an hour, unless the action of the pack be too exciting. This should be followed by a bath (86°). Stimulating abdominal compresses should also be worn for the purpose of reducing the swelling of the spleen, unless deficiency of bodily heat should render this unadvisable.

With patients of weak constitution, a milder treatment should be adopted. A daily lukewarm (73°) wet rubbing is recommended in such cases. If well borne, it may be repeated in the afternoon.

It would also be well, with feeble patients, to try the effect of a stimulating full pack. It must be stopped as soon as the patient begins to feel uncomfortable.

Other points to be attended to are: Strictly non-stimulating diet, avoidance of alcoholic beverages as far as possible, drinking water in case of thirst in malaria districts, open-air exercise, well-ventilated rooms, open windows (especially at night), and enemata for constipation and for derivative purposes. For Modes of Application, see Index. See also "MALARIAL FEVER" under Kneipp cure.

CASE OF MALARIAL FEVER.

Cured in the BILZ Sanatorium.

Mr. *O.* of N. was seriously ill with malarial fever. The attacks were so frequent and violent that the patient was in a state of utter prostration. The treatment in the establishment consisted of box steam-baths, steam-baths in bed, shallow baths, massage, and dry packs, the latter especially being applied when a feeling of shivering came on. At every attack which began with shivering, the patient was vigorously rubbed by two masseurs with bare hands, special attention being given to the feet in this operation, in order to render the cold stage more tolerable, and then put into a dry pack. The disease was of so obstinate a nature, that, in spite of a non-stimulating diet and of all the remedies of the Natural Method of Healing, no improvement was apparent after three weeks' treatment, and the patient was tempted to give way to despair. After that, however, the attacks became less frequent, and the patient gradually

increased his strength and weight. When he left the establishment, after a course of six weeks, the attacks had almost ceased. He underwent an after-treatment for a short time in his own home, till the attacks at last entirely disappeared. He paid a visit to the establishment about six months afterward, and described himself as the healthiest man in the world, informing me at the same time that a colleague of his, who had likewise brought this serious disease with him to Germany, had unfortunately died in consequence of medical treatment.

Marriage, see "MATRIMONY."

MARRIAGE. (The Married State.) Marriage decides life's happiness, for it may be the course of joy, bliss, and contentment; or of care, sorrow, grief, anger, misfortune, misery, and despair. If those who unite in wedlock, possess good qualities,—domesticity, frugality, consideration, patience, and good sense, as well as the will to work, and if they are free from vice and passions, they will endear themselves to each other, as time goes on, and marriage then is a great earthly blessing, with many joys springing from it. An unhappy married state, on the other hand, is a great affliction renewed every morning, a curse, a desert of the deepest misery and despair. For a marriage to be a happy one, it is necessary, above all, that the parties should have sufficient means to live upon, which, in these hard times, it is often difficult to procure. Lamentable fact!—More on this subject, and hints how to remedy these evils, are contained in my book: "How to Improve the Times."

Massage, see Index.

Massage, Derivative, see Index.

Massage, Description of, by Dr. *Bitterfeld*-Confeld, see Index.

Massage, Electric, see Index.

Massage in Childbirth, see Index.

Massage in Regenerative Treatment, see Index.

Massage of the Abdomen, see Index.

Massage of the Body, see Index.

Massage of the Chest and Back, see Index.

Massage of the Eye, see Index.

Massage of the Head, see Index.

Massage of the Pelvis, see Index.

Massage of the Stomach, see Index.

Massage of the Throat, see Index.

Masturbation, see SELF-ABUSE.

Meal Poultice, see Index.

Meal Soup, see "DIET."

MEASLES must be reckoned among the most frequently occurring infantile diseases, accompanied with cutaneous eruption and fever. This complaint, which is highly contagious, and appears mostly with children of from two to ten years of age, frequently assumes an epidemic character, and its course may be mild or malignant.

The primary duty of parents is, therefore, on the outbreak of measles in the place or in their family, not to let their children have access to others attacked by it.

SYMPTOMS.—The premonitory symptoms are: Irritation in the nose, tickling, sneezing, red and watery eyes, cough, expectoration, headache, insomnia, pains in the limbs, slight shivers, fever toward night, dread of light, catarrhal affection of the respiratory passages, red spots on the mucous membranes of the mouth, gullet and larynx. In many cases these symptoms are attended with fever. After three or four days the eruption of the measles appears on the skin, accompanied by a peculiar odor. It shows itself first in the face and thence spreads downward. It consists of small spots (the size of lentils or beans) of a deep-red color; in the centre of each of them is a little vesicle, often perceptible only with pressure. (The skin therefore exhibits red and raised spots, between which there are always and everywhere healthy and pale places, looking like islands between the red parts. These isolated healthy places form the distinguishing mark between measles and scarlatina.) The stage of eruption generally lasts for twenty-four hours, during which time the fever usually abates. After a further three days the eruption loses its color, gets pale, gradually disappears, and is exfoliated in a bran-like powder. With it the fever abates and the catarrhal symptoms take a favorable turn, *i. e.*, the discharges of mucus become thicker, more abundant, more viscid, of a greenish color, and gradual improvement sets in.

Other diseases, especially those of the lungs, may appear simultaneously with the measles.

CAUSES.—Generally infection, especially at the outset of the disease, mucus which has been coughed up, vitiated air, saliva, tears, and exhalations of the skin of patients affected with the measles are the agents of infection. Also sleeping in thick feather-beds, or with the windows closed, want of attention to cutaneous action, eating too much animal food, etc., may cause the disease.

TREATMENT.—Care must be taken in the first place that the eruption may follow its normal course; the skin, therefore, must be aided in its process of eliminating the morbid matter. The nerves also must be strengthened by keeping down the temperature.

The patient is therefore given a lukewarm bath (86° to 90°), the whole body rubbed with the bare hands quickly and lightly at the same time, and then put to bed, or he may have at once a tepid three-quarter or full vapor-bath No. 1 (72° to 81°), duration from an hour to an hour and a half, or as long as the patient feels comfortable in it, but if he finds the pack irksome, he should at once be taken out and given a bath as before. The steam-bath in bed should be repeated, according to the patient's condition, once or twice a day. Two enemata daily (77° to 81°).

If the eruption is only partially developed or suppressed, quick, cool, wet rubbing of the whole body, followed by steam-bath in bed, should be resorted to. In general, light, non-stimulating food, fresh air (a window being always kept open), enemata for derivation and constipation. Gargling every hour with water of 66° to 72°. Frequent cleansing of the nose with water of 76° to 81°. Wet the mouth and ears occasionally with a cool, wet linen rag. Children suffering from the measles may—nay, should, if it is in any way possible—be dressed in warm clothing, according to the temperature, and allowed to move about out of doors in the open air.

If the eyes are much inflamed, the window-blinds should be drawn down to protect the child from the painful light, and its eyes wiped or wetted repeatedly with a soft rag squeezed out moderately in tepid water.

With this treatment, the measles will only last a few days. See also under "SCARLATINA" and "BAD HEALTH."

ANOTHER TREATMENT.—Tepid (73°) abdominal and leg-packs. If there is high fever, 73° three-quarter pack or steam-bath in bed to be applied as above (duration, from one to two hours, but must be removed when troublesome), followed by a (73°) wet rubbing of the whole body. This is to be repeated, if the fever rises again. If the eyes are inflamed, the room must be kept rather dark, for the rest as above.

When the measles subside, and the disease may be looked upon as over, a light wet rubbing of the whole body or bath once a day may be

applied, and every second or third day a steam-bath in bed, followed by a bath or a light superficial wet rubbing of the whole body; these measures to be carried out for about a week, in order to remove every vestige of morbid matter from the system. For Modes of Application, see Index. See also "MEASLES" under Kneipp cure.

If children, after an attack of the measles, show a want of appetite and cheerfulness, and are, perhaps, a little feverish now and then, it is the best proof that morbid matter still lurks in the body, and a bath must therefore be given every day, an abdominal compress every night, and the steam-bath in bed (with two or three days' interval) continued till all bad matter, circulating in the blood, is thoroughly eliminated from the system, and the child has become once more healthy and cheerful.

HOW MY TWO CHILDREN WERE CURED OF THE MEASLES.

Last spring, when the measles and other children's diseases appeared in our town, my two young children, a girl of six and a boy of three years, were attacked with the disease. The girl had the measles very badly indeed,—high fever, swollen tonsils (the malady, in fact, assuming the character of diphtheria), both her eyes greatly inflamed and swollen, and causing her to keep them closed for nearly a whole day. In spite of the malignant character of the malady, the child remained in the room and in bed only for one full day. On Friday she still went out, on Saturday she did not wish to get out of bed, or to have anything to eat, and she hardly opened her eyes at all, whereas on Sunday morning, having been taken out of the steam-bath in bed and bathed, she asked for something to eat and to be taken down into the sitting-room. In the afternoon of the same day, when my wife was going out with the little boy (who was attacked with the measles a week later), she begged to be allowed to go out too. As it was a warm, bright day, I saw no reason for keeping her indoors, although she could not walk comfortably yet, and her face, etc., was entirely covered with the rash; for all that she was tumbling about merrily in the open air for two hours, and sat down also for a time on a grass-plot.

When she came home, she coughed rather more than before; but it was a loose cough, and she threw out a great deal of phlegm; such a cough, though increased, need cause no anxiety, since it is only a favorable healing agent. The steam-baths in bed were continued, a bath in the daytime and an abdominal compress at night were given, and the girl became stronger and healthier day by day, went out always in the open air, and only missed school for a few days; she has been well and cheerful

to this day, though my anxious neighbors, seeing the child on the second day out of doors, prophesied the worst relapses,—affection of the eyes, etc. The boy's case was certainly not quite as bad as the girl's, but it was bad enough. Nevertheless he, too, was confined to his room and his bed for one day only. The next day he went out of doors for a short time, and speedily got and remained well, in spite of the repeated evil forebodings of my neighbors. The Author.

MEAT is to be taken in moderation,—as a *supplement* to the meal, as it were. Belonging, as it does, to the class of stimulating food-stuffs, and being productive, when eaten in abundance, of a quick pulse, it puts the blood in motion, stimulates abnormally, and impedes perspiration (or exudation) through the pores. Children, in particular, should, as a rule, have no meat. Although in some diseases it may be indulged in, yet in chronic, and particularly in acute (fever) diseases, it is to be avoided or, at least, greatly to be limited. It is a great mistake to suppose that meat, the juices of meat, extract of meat, etc., strengthen the patient, and quickly improve his condition. The great number of doctors who, for that purpose, prescribe it for their patients, commit, we are sorry to say, a signal indiscretion, as meat, far from favoring the patient's prospects, only acts upon him in a decidedly prejudicial manner. Boiled meat is more difficult to digest than roast meat, and it is therefore less suitable for invalids. See also "DIET, MIXED." and "STRENGTHENING TREATMENT."

MEDICAL MEN ON THE INJURIOUSNESS OF TAKING MEDICINE, OPINIONS OF.*) The disadvantages attaching to the use of medicines in the treatment of diseases have been repeatedly pointed out in this work. These opinions might be considered inconclusive, if not exaggerated and erroneous, by some people and authorities. Medical men might even smile at them. In order to add a certain emphasis to our assertions, and hoping to make a deep impression on physicians, we quote here the utterances and opinions of celebrated medical authorities. Our object is not to hurt the feelings of medical men, but to inform their minds, and to exhort them not to pursue their course. For if their own colleagues enter on a campaign against medicine, as the foundation of so much mischief, it is indeed urgently necessary that physicians should give to so grave a matter their fullest consideration.

Dr. *Granichstaetten* says: "Decline, in its innumerable gradations and forms, is generally but the result of more or less successful cures with medicines, which are properly administered with the object of overcoming

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*) A number of the remarks and opinions are taken from works by Dr. TRALL, THEODOR HAHN, etc., etc.

the original disease, but which nearly always leave behind in the system after-effects, that show themselves sooner or later, and are then usually ineradicable.—This sickness is therefore rightly termed drug-sickness, and it is a faithful companion of advanced age, particularly amongst the higher classes, but not unfrequently also is it the heritage of tender childhood. Since chemistry has become so free-handed with the various preparations of quicksilver, antimony, quinine, hydro-cyanic acid, lead, arsenic, sulphur, etc.—and since some of these have been applied, commonly and at times with inhuman heroism, as powerful remedies for complaints, of which nothing was known in former times—since then decline has spread most lamentably and will be inherited by posterity.

"He who has once fallen a prey to this evil, is for the rest of his life dependent on the drug-shop."

Dr. *Kieser* writes: "The old saying is, in many cases, true, that physic often does more harm than the malady, and the remedy is worse than the disease. A great many disorders are simply cured by nature, and the only thing which a physician can and may do in most diseases is to keep off and remove injurious influences, and to abate the abnormal activity of individual sub-systems and organs. If he does more, whether to satisfy his patient's craving for medicine, to support his own dogmas, or even to fill his pocket, he can only do mischief.

"Thus artificial diseases are frequently created, and in many cases of medical treatment it may be maintained that chronic sequelæ are produced by the doctor's fault alone, and for that reason every patient should, in consideration of the present state of practical pharmacology, be warned against a doctor as against the most dangerous poison.

"This is pre-eminently taught by the history of medicine, in which each particular, and therefore one-sided, medical theory is shown to have claimed a number of victims often greater than that demanded by the most desolating plagues or the most protracted wars."

In a similar strain the respected Professor Dr. *H. Stevens* said at the College of Physicians and Surgeons in New York, in a lecture to the medical class: "The older doctors get, the less they believe in the efficacy of medicine, and the more they put their trust in the forces of nature." Notwithstanding all our vaunted improvements, patients have to suffer as much as they did forty years ago. "The reason why medicine has progressed so slowly is, that physicians, instead of studying nature, have read the writings of their predecessors."

The equally estimable Professor Dr. *M. Smith* says: "All medicines which enter into the circulation of the blood, affect it in the same way as the poisons which produce disease. Physic heals no disease. Disease

derives its cure always and only from the vital force resident in man. Digitalis has sent thousands of people to the grave."

Dr. *Hosack,* formerly professor at the same college, was wont to say: "This herb (digitalis) owes its name to the fact that it points the way to the grave." Hydrocyanic acid was once extensively applied for consumption, both in Europe and America; thousands of patients were treated with it, but not a single case turned out favorably; on the contrary, hundreds were carried to the grave.

"I know very well," says Dr. *Carus*, physician to King *John* of Saxony, in his book, "The Voice of a Physician, Grown Gray in Practice": "I know very well that perhaps seven-tenths of mankind have not died of disease, but of untimely or excessive dosing with medicine."

Dr. *Trinks* and with him all humane medical men have long ago recognized and declared that the art of medicine will perish sooner or later as everything must do that wars with "reason and nature." "The death-germ of the medical art," says Dr. *Trinks*, "is within the art itself, —in the ever-increasing divergence of practice from science,—and suffering humanity can only be the gainer by the fall of allopathy. It will be able to rejoice over the mitigation and cure of infirmities, extending over thousands of years."

"A number of patients," says Dr. *Gleich*, "die every year solely as the consequence of treatment with drugs, and a great number become dangerously ill from the same cause. This is the bare truth and indeed it is a hard truth, but it must be spoken nevertheless for the sake of suffering humanity."

Professor Dr. *Gilman:* "Many chronic complaints of grown-up people are the consequence of mistaken treatment in childhood."—"Plasters applied to children nearly always cause their death."—"I give calomel to them if I want to tone down their vital force."—"To give an infant opium frequently causes its death."—"A single drop of laudanum will often kill a child. Four grains of calomel frequently suffice to kill an adult person."—"A mild treatment with calomel is synonymous with gently opening a human throat with a dissecting knife."

Professor Dr. *Andrew Clark:* "Thirty to sixty grains of calomel have been given to young children for quinsy."—"Persons struck with apoplexy who are not bled, have twice as much chance of recovering than those treated on the opposite system."—"Doctors have found out that more bad than good results are obtained by the treatment with medicine of measles, scarlatina, and other self-limited diseases."—"According to my experience, it is impossible to cure croup well; at any rate, the result of the treatment is most doubtful. Every year sees a

new method of cure introduced, only to be changed the next year."—"Ten thousand methods have been tried in vain for diabetes."

In their zeal to do good, doctors have done much mischief. They have brought many to the grave, who, if they had been left to nature, would have recovered.—"All our remedies are poisons; every dose therefore, which is given, diminishes the patient's vital force."

Professor Dr. *Peaslee:* "Giving powerful medicines is the most fruitful source of deranged digestion."—"To prescribe morphia and other sedatives for silencing a consumptive cough, is a dangerous beginning."

The English physician Dr. *Forth* says: "I never could understand how people could put trust in physicians and in the medical art. This extraordinary fact is to be explained by the indolence to which the greater part of the world yields. It is this indolence which allows people to look with indifferent eyes on this destructive empiric art. If they would open their eyes, they would see that the entire art of medicine is nothing but a refined, subtle deception, and that the doctors are either cheats or ignorant and self-deceiving. A monarch who would rid his realm of the whole pestilential troop of doctors and apothecaries, and would forbid completely the practice of medicine, would deserve to be regarded and honored as one of the greatest of men and as a benefactor of the human race. I do not believe that it is possible to imagine a more dishonest trade than that carried on by the present medical profession."

Medicines, powders, ointments, even mineral waters, etc., are all injurious to suffering humanity. They are at best only burdensome loans, which we contract when necessity compels us, but of repaying which we see no prospect. They seem to save us for the moment as usurers do, but bring us deeper and deeper into debt, till we have one day to pay for all at once. The Author.

Professor Dr. *Coy:* "There is a great deal of truth in Dr. *Bennett's* assertion that blood-letting in inflammation of the lungs doubles the mortality."—"The fewer remedies they (the doctors) employ in any disease, the better for their patients."—"Calomel is our sheet-anchor in fever, but it is at the same time an anchor which drags the patient down into the grave."

Professor Dr. *Barker:* "The medicines which are prescribed for the cure of scarlet fever and measles are far more deadly than these maladies themselves. I have treated them without medicine, and obtained excellent results."—"I have seen several ladies become habitual drunkards through being ordered some alcoholic beverage as medicine."—"I incline to the view that calomel, applied in the form of an ointment, is far more injurious than useful."—"I believe that blood-letting is mischievous and

unnecessary."—"There is—I say it unwillingly—as much empiricism among medical men as among quacks."—"Instead of making independent researches, medical authors have only copied the errors of their predecessors, and by so doing have retarded the progress of medical science, and propagated error."

Professor *Carson* says: "Water is the very best sudorific that we have."—"My teacher gave his patients colored water, the result being that they recovered more quickly than those of a colleague who resorted to bleeding."

Professor *Peaslee* says: "Water forms about four-fifths of the weight of the human body, and is its most indispensable constituent part."—"Water is the only necessary and the only natural beverage."

"I have no faith whatever in any medicine."

Dr. *Baile,* London.

"The modern practice of medicine is at best an entirely uncertain and unsatisfactory system; there is neither philosophy nor common sense in it to make it trustworthy." Professor *Evans,* London.

"Gentlemen, ninety-nine out of every hundred medical facts are medical falsehoods, and medical doctrines are for the most part nothing but pure evident nonsense." Professor *Gregory,* Edinburgh.

"Those physicians generally become the most eminent who have most thoroughly freed themselves from the tyranny of the medical schools. Dissections convince us every day of our ignorance in the field of pathology, and make us ashamed of our prescriptions. What mischief we have done on the strength of faith in false facts and theories. We have multiplied the diseases and have augmented their dangerousness." Professor *Rush,* Philadelphia.

"There is no denying the fact that the present medical system is a disgrace to its professors, if a string of vague and empty absurdities altogether deserves the name of system. How rarely do our medicines effect any good! How often do they not aggravate the patient's condition! I say it without hesitation that in the majority of cases the sufferer would be safer without a doctor, than with one. I have seen quite enough of the wretched work done by my colleagues to be able to justify my strong words." Dr. *Ramage,* in London.

"Surely the uncertain and totally unsatisfactory art, called medical science, is no science at all, but a confused mass of incoherent views, of conclusions drawn hastily and often wrongly, of misunderstood or dis-

torted facts, of comparisons without comparison, senseless hypotheses, and not only useless but even dangerous theories."

"Dublin Medical Journal."

"Some patients get well with the aid of medicine; a greater number without it, and more still, in spite of it."

Dr. *Forbes*, Physician.

"Thousands of people are annually dispatched in the silent sick-room. Governments should forthwith banish medical men and their tentative proceedings, or think of other and better ways to give greater protection to the people's lives than they grant them at present, troubling themselves far less about the exercise of this dangerous profession and the privileged murders which it commits than about the most trivial things." Dr. *Frank*.

"Let us be astonished no longer at the lamentable failure which characterizes the practice of our profession, seeing that we possess scarcely one sound physiological maxim. I do not hesitate to declare, much as it may hurt our vanity, that our ignorance of the true character of the physiological disturbance (called disease) is so enormous that it would perhaps be far better to do nothing whatever and to leave the disease in nature's hands than to act without knowing how and wherefore, a course to adopt which we are frequently forced at the imminent risk of accelerating the death of the patient."

Dr. *Magendie*,
(the celebrated French physiologist and pathologist).

"I have no doubt in my mind that the majority of deaths among children is due to the wrong and improper application of exhausting remedies." Dr. *Hall*, the known English physiologist.

"Our pathological knowledge does not increase in proportion to our tentative way of treatment. Every dose of medicine given is a haphazard attempt on the patient's innate power." Dr. *Bostock*.

"I have no wish to revile the lofty profession to which I have the honor of belonging and to which I owe many of my best and most esteemed friends; still I can not reconcile it with my conscience to keep back the expression of my conviction that medical men, with their favorite modes of treatment, do a great deal more harm than good. Were they effaced, mankind would be an immense gainer by it.

Dr. *Cogswell*, of Boston.

"Medical science is a barbarous jargon, and the effects which our medicines produce on the human system are in the highest degree uncertain; only one thing we are sure of, *viz.*, that they have destroyed more lives than war, pestilence and famine taken together."

Dr. *J. M. Good,*

"I declare it to be my conscientious conviction, based on long experience and thoughtful reflection. that there would be fewer diseases and less mortality on earth if we had not one single doctor, surgeon, obstetrician, chemist, apothecary and druggist, or any medicine at all."

Dr. *Johnson*, Editor of the "Medical-Surgical Review."

There undoubtedly exists very wide-spread discontent with the so-called regular or old allopathic system of medicine. Both here and in Europe a general want of faith in physicians and their art is greatly felt. The cause is palpable. An erroneous theory, and injurious, often, very often, destructive exercise of the profession. The absolute requirements of an intelligent community can only be satisfied by a system of medicine at once based on reason, in harmony with the infallible laws of nature and the living human body, fortified by them, confirmed and strengthened by successful results." Professor *Trall.*

The "Vienna Weekly Medical Journal," which has a large circulation, has, in its issue No. 44, 1873, an article by Dr. *Lorinser,* in which he says: "Before everything else we must speak here of the great folly which the high priests of medical science teach their disciples, though they themselves and the great mass of doctors no longer believe in it; I mean the fable of the power of medicine, or pharmaco-dynamics, their pharmacology. To the various medical wares from the vegetable, mineral, and animal kingdoms are there falsely attributed, to the smallest detail, such extraordinary effects that, if they were literally true, the human race would once and for ever be rid of every disease. The magic powers of the medicines are there set forth so minutely and so convincingly that the medical student, to whom these secrets of nature are so demonstratively disclosed, must wonder how it comes about that, notwithstanding all medical treatment, so many people still die.

This our pharmacology, which is even now-a-days taught at the universities, concerning which thick volumes are written, that students have with great difficulty to learn almost by heart, belongs certainly, as to nine parts in ten of its contents, to the domain of legend and tradition, and as such is a remnant of the old belief in magic.

What is a common-sense man to think of us "physicians," when he reads such literature and remembers at the same time that his family doctor, in treating cases of illness as they occur, moves only within the

compass of this medical maze, in which he himself cannot possibly feel at home. I know cases where educated patients secretly blushed for their doctor that he could require them to take his medicines and, in the end, after the patients' recovery, could boast of the efficacy of the medicines which they had thrown into the chamber utensil. Are these conditions suitable for our century?—"

Boerhave, the great physician and naturalist, felt it right, more than a century ago, to say: "If one compares the permanent good which half a dozen true sons of Æsculapius have established on the earth since the birth of their art with the evil which an untold number of doctors of this profession have brought on the human race, one is forced to the conclusion that it would have been better for humanity if there had never been any doctors in the world."

Fr. Hoffmann, an equally celebrated physician of a still earlier century, gives as a fundamental rule of life: "He who values his health should avoid doctors and their physic."

Peter Frank, a great medical authority at the end of the last century, complains (in his "System of Medical Policy, part I") "that the attention of the State had been confined till then more to the surface of things, in outbreaks of plagues and epidemics, and to measures against quackery and bungling, while but little protecting the public from medical men and taking no thought of the thousands who are gradually sacrificed in the silent sickroom.—The State should resolve, once for all, either to banish doctors and their art entirely or to come to some arrangement by which human life would be more secure than it is at present."

Hecker says in his "Short Sketch of Pathology and Semiology": "Our systems of cure and our medicines, though their purpose is to heal diseases, must yet be reckoned to be a very common and general cause of producing them." And in his "Medical Theories, Systems, and Methods of Cure" (Edition 1819, page 5): "What, according to one theory, is truth and presumably proved to be so, is refuted and denied by another; one treatment, declared by one to be useful, is rejected by another as absolutely injurious; nay, there are plenty of instances in which doctors have branded certain methods and medicines as murderous, the healing value of which they could not sufficiently praise a few years before.

v. Wedekind says in his work "On the Value of Therapeutics, 1812," page 345: "The value of medicine, expressed in a few words, consists principally in the fact that civilized nations have to suffer far more from doctors than from diseases."

Rush acknowledges in "Collection of Select Treatises," (volume IV, part 2, page 297), very naively: "We have not only increased the number of diseases, but we have rendered them more fatal."

Dr. *Richter*, Army Surgeon, of Enslin, near Berlin, in his "Waste of Medicine" says: "The common prescription writer frequently creates by his physic a second and artificial illness, which complicates the patient's condition or confuses the critical symptoms, of which he does not understand the value, and so retards recovery. If the patient's innate healing power overcomes not only the disease, but also the inroads of the doctor, this clever disciple of Æsculapius imagines that the cure has been brought about by his prescriptions. Thus, like the unprofessional man, who every day takes the *post hoc* for the *propter hoc*, he misses the mark and moves on to the end of his life in self-deception and falsehood.—There is no science so full of false conclusions, errors, dreams and falsehoods as medical science."

Dr. *W. Schlesinger* writes in the "Vienna Medical Weekly," 1867, No. 54, page 861: "What one praises, another ridicules and holds up to suspicion; what one gives in large, the other did not venture to give in small doses; what one doctor extols to-day as new, another does not consider worth rescuing from oblivion; one swears by nothing higher than morphia, a second treats three-fourths of his patients with quinine, a third expects everything from purgatives, the fourth from the healing power of nature, the fifth from water. One blesses, another curses mercury. While I am writing I remember when mercurial ointment was in vogue, was next condemned, then again held in honor; we believed it buried, and had delivered over it a highly honoring funeral oration, and then some doctors exhumed it again and are now singing a new and enthusiastic panegyric in praise of its healing power. Within a couple of decades we have lived to see such things, in one and the same (Vienna) "School," under one and the same infallible, therapeutic despot, girt with the sword of victorious science."

Hahnemann says in his "Allopathy, a Word of Warning to all Patients" (Leipsic): "Hundreds, nay, thousands, perish miserably every year, the most hopeful sons of the State, in the flour of life, from consumption, tuberculosis and pulmonary suppuration. It is you, doctors, who have their death upon your conscience! For was there one among them, in whom the foundation was not laid by your fine method of cure, by your foolish bleeding and your antiphlogistic (anti-inflammatory) treatment of a previous attack of pleurisy but which had not absolutely necessarily have become consumption? This senseless, barbarous mode of treatment by blood-letting and other methods of drawing blood from the system, and by lowering drugs, sends thousands annually to the

grave through dropsy and consumption! Truly, a most excellent privileged method of killing off covertly the flower of mankind wholesale."

Krueger-Hansen says in his "Kurbilder," page 10: "I know perfectly well, and am not afraid of acknowledging it, that I have done injury to a number of people in irritating and inflammatory fevers by applying leeches and by bleeding; that I have prolonged their sufferings, rendered them sickly, sent them to a premature grave and thus filled my churchyard too early." But when the doctor stands ready with his cupping-glass, lancet and leeches, though in the eyes of the public he appears perhaps as a master of his art, like a prince who silences the voice of his people with grape and canister, he is, nevertheless, like the prince, a destroying angel to mankind."—"As the scythe mows down the fruits of the earth, so the doctors are keen, by means of their weapons —which they are allowed to use without any responsibility on those who daily trust themselves to their protection—to manure the churchyards. Is there a heavier scourge for humanity than the presumption of medical men? Posterity will wonder that such a demon could exist in so enlightened a century."—"*S.*, a doctor and apothecary in New-Brandenburg, boasts of giving annually 6,000 emetics! The French Parliament of 1740 was already sensible enough to forbid doctors to employ emetics, and yet since that time the doctors have been allowed to kill so many victims in the delusion that, when impurities are present in the stomach and alimentary canal, the employment of means to clear them out, upward or downward, is a necessity.

If universities had never been founded for the education of medical men, the Art of Healing would long ago have raised itself to a surer and more beneficent science. "Every science, art and trade has, in course of times, progressed conformably with contemporary knowledge and requirements; no art has remained so far behind in its imperfection as the art of medicine, simply because its teachers and practitioners overlooked and did not value the power of the organic function, and did not profit by their experience of failure.

Methods of treatment changed like fashions; the doctors adopted now this one now that, set up now this system now that, and if the latest did not seem to answer, sought out an older one, which had already been tried and found wanting.—"We often see the doctor change his scheme of treatment in a day; he prescribes medicines, has them put away almost before they have been tried and, chewing his pen, takes up a slip of paper to write another prescription. If our churchyards could relate how they were manured with the bodies of people torn from the joys of life, the doors of a good many doctors would remain unopened." One would think that with the increasing number of medical men, who

shoot up in heaps like mushrooms out of the earth, an effectual barrier would be raised against the ravages of disease. But far from it, on the contrary; the deathrate increases with the number of doctors, for where the doctors stand thickest there the mortality is highest.

Dr. *Scharf:* "Dispensaries, instead of being armories of health and life, are hypocritical armories of death and disease for the unwary and retrograde state which they cheat and deceive."

Assuredly the fact deserves to be more generally known than it seems yet to be, that he who is undoubtedly the most eminent German physician of modern times, Professor *Skoda*, in Vienna, has prescribed for many years past in his department of the General Hospital of that city ***infusum graminis*** (decoction of hay) for all diseases, with a result proved statistically exactly equal to that which he had obtained otherwise with the usual medicines. One must in fairness ask, when one sees how bravely and blithely prescriptions continue to be written, "How do those who do this propose to learn? Here was the physic, the patients died . . ." Medical authorities, who prescribe for their patients special medicines and treatment for certain diseases, do not, as a rule, when they are themselves suffering from the same complaints, take the same remedies. Very many people recover from illness without doctor and without medicine. Hippocrates declared, more than two thousand years ago, that it is nature that cures diseases.—Woe to a child whom the doctor approaches with his remedies. Loss of appetite, pallor and emaciation follow irrecoverably.—A doctor fond of giving medicine must not come near my sickbed. Professor Dr. ***Bock.***

Bichard, a famous physiologist, makes the humiliating avowal that the Materia Medica is nothing but a monstrous conglomeration of erroneous ideas, an unconnected collection of conflicting opinions of all sciences. It is the one which best illustrates the aberrations of the human mind. It is not a science constructed for a methodical mind, but a mass of observations often childishly compiled, under adverse circumstances, of illusory methods, of formulas, as grotesquely exhibited as they are arbitrarily combined. They say, practical medicine is full of contradictions; I go farther and say: "It is in no respect a profession worth choosing by any sensible man.

Dr. ***Lauter-Brunton,*** professor of Materia Medica and Therapeutics at St. Bartholomew's Hospital, and author of several medical works, says: "Our ideas are frequently vague and misty. We often give medicines at random, without a fixed notion how they will act, but simply in the hope that their effect may be good. Where the effect fails we are unable to assign a reason for it, nor do we trouble ourselves to find one."

Sir *Robert Christison,* Professor of Materia Medica at the University of Edinburgh, says: "Of all medical sciences, therapy is the vaguest and least satisfactory one, as constituted at present, and keeping least abreast of the times. There is, it is true, no lack of new remedies of empirical origin, which have been introduced during the last forty years, and a few of which have stood the test, promising to be a lasting benefit to mankind (?), but their number sinks into utter insignificance compared to the infinite amount of rubbish sprung from illusion and imposition and is used by the profession year by year only to be forgotten again after a short period of undeserved popularity."

Sir *Astley Cooper,* Lecturer at Guy's Hospital, said: "Look, gentlemen, at the hundreds of patients who come to the hospital. How wretched their treatment! You observe that I visit this hospital but rarely and I will tell you why. I stay away because I cannot bear to see the infamous system of treatment meted out to them. No consideration shall restrain me from suppressing my feelings, and I maintain that the present treatment to which patients are exposed is vile and shameful, for their health gets irretrievably ruined through it." And on another occasion this eminent surgeon gave expression to the following view: "Medical science is founded on mere suppositions, and improved upon by murder."

Dr. *Steudel* ridicules very effectively the various active services which medicine is meant to perform when he says: "The stomach is looked upon as a post-office which has to dispatch the packets (pills, powders, mixtures) handed in to it, to their various addresses, but it is hardly ever able to do so from press of business."

Professor Dr. *Carson* said: "It is easy enough to destroy a child's life. You will find that, gentlemen, as soon as you enter upon the exercise of your profession. You will find that an imprudent stroke of the pen, which prescribes a trifle too much of a remedy, blows out the child's life; and on the next visit which you pay the little patient, you will see stiff and cold what a few hours ago, when you left it, was happy. Be cautious, therefore, in the application of your medicines!"

Professor Dr. *Kobert* in his "Hand-Book on Poisons," 1893, page 34, writes: "By the term medicinal poisoning we understand such cases of poisoning as doctors are responsible for. Their number is legion, and this number can only be reduced when the medical student devotes more time to the study of the Pharmacopœia and Toxicology than is the case at the present day, and when he ceases the bad habit of trying experiments at his patient's bedside with new medicines not yet fully examined by the pharmacologist, the mixtures being unknown and of

doubtful efficiency. Such experimenting is 'cruelty to animals' and should be prohibited by the State."

In the same work, page 81, he says: "Unfortunately we doctors must confess that the number of people killed by wrong doses or unsuitable medicines is a very large one. As doctor to the Law Courts one often finds oneself in the awkward predicament of accusing a colleague of murder, but it can generally be defended by proving that the medicament in question is somewhere in some medical work recommended in considerable doses. I do not know of a single poison that one cannot at some time or other prescribe as medicine, since fluoric acid, nitro-glycerine and hydroxylanim, etc., have been used therapeutically."

Professor *Schweninger.* "The morphia habit originated with doctors and is still induced by their treatment; this is a crime that we must call them to answer for, so that in future they may exercise more care in their use of medicines and recommendations."

Professor *Volkmann* has often asserted openly that the present system of doctoring sadly needs reform. Shortly before his death, in November, 1889, he said to his hearers, as a Stuttgart paper reported: "Gentlemen, all our so-called rational ideas on the subject of medicine are good for nothing. The whole study of medicine is only an experimental science. We must strive to heal by natural means. When (for example) we place a sprained limb in plaster of Paris, we only delay the absorption of the diffused blood and often make cripples of our patients. We may learn a good deal from bone-setters and old women; they work their cures with natural, harmless, domestic remedies, cold compresses, kneading (massage) or stroking the affected parts of the body with their hands, etc."

The views of a doctor concerning various medicaments will be found in the "Medizin-chirurg. Central-Blatt" of February 18, 1898, where Dr. *J. A. Goldmann* says: "Creosote and Guajakol have not only a disagreeable and repulsive taste and smell, but they act corrosively and harmfully on the mucous membrane of the stomach; after continued use they hinder the secretion of the gastric juice and consequently produce loss of appetite and indigestion. It is true that these deleterious qualities have been obviated by using carbonate of creosote and carbonate of guajakol; they have no longer the disagreeable smell and taste and do not corrode the stomach, but this is only because they pass through it undissolved, while in the intestine; the alkalis of the pancreatic juice separate the acids from both creosote and guajakol and enable them, therefore, to be as harmless as they were before in the stomach, when they were not combined with acids."

Professor *Schweninger* says: "The credit of the only means of salvation of the prescription is woefully shaken. Few physicians still

believe in the healing efficacy of their red, green and white medicines. That we no longer deceive ourselves is indeed laudable. To make up for that, however, we tell the public all kinds of things about our art, at which we sneer among ourselves. What our predecessors considered good, we still proclaim as gospel, although we have long known that the message is false. Pious fraud has taken the place of error.

The mischief begins at the university. There, where the discovered science dwells, it is that the successes of chemistry are invented. When the clinical teacher has with painful care dissected the "case" for the pupil, then, by way of finale, comes the farce of therapeutics. It is only those who are in the know who see the humor which lurks in the dignified, confident exposition of a clinical legend.

The results of this education are nil. When a student quits the university he knows nothing about the art of healing. If he is a man of independent mind he may, perhaps, shape for himself a system of therapeutics, according to his own ideas. Such a man, however, is an exception. As a rule, the doctor remains at the point at which he was examined, and that is low enough in all conscience.

The seed of falsehood sown at the university bears fruit in the practice of the profession. Such is the custom. It is the usual thing to write prescriptions; why debar oneself from so doing? It is so convenient. It is only necessary to look in the book, there it stands: for such and such a disease such and such a medicine. With a good memory we can do without the "Crib."

These are, however, harmless things. But there are others, not nice to touch upon. The patients stay away, unless they get their little bottle of magic drops. The receipts fall off, and the greed of gain, or necessity, drives the unbeliever to write prescriptions.

The patients keep away. They want to be cheated. They imagine that cure is impossible without medicine. We doctors have talked to them of the power of the apothecary's stuff till they have come to believe in it. Every number of a medical periodical praises new remedies, and there are doctors who can read such matter without laughing.

The client does not advise his lawyer what answer he shall give; the congregation does not dictate the sermon and the pupil does not teach his master, but we allow any old woman to instruct us as to our treatment of a disease. We wear the fool's cap and bells because the public wishes it. It has come to this, that it is no longer we who treat the patient, but that every fool who comes to consult us is cured according to his own silly ideas. Nature is patient; it can cure also without therapeutics.

A doctor once gave me an odd reason for prescribing medicine without himself believing in it. He said that writing a prescription is a kind of a hypnotic suggestion, a physological method of cure.

The patient derives consolation from the consciousness of having some health-bringing drops, and that gives him strength to overcome the disease. But truth is worth more than pious falsehood. One gets on better with it.

And now for the prop of stupidity: *Ut aliquid fiat!* "something should be done!"

When the anxious mother calls in the doctor, because her child has had a fall and got a bruise, when the tippler holds out his tongue deliberately to the wise man, or the old maid complains about a cold in her head, the expression *Ut aliquid fiat!* drops from his lips as they part in a knowing smile. And he dips his pen in the ink to write the saving word. He knows perfectly well that the trouble will pass away of itself. But let no one suspect him of such a thought!

The saying sounds rather more serious in a case of typhoid fever or of inflammation of the lungs. There is no remedy against these but *Ut aliquid fiat!* is decreed with doubly wise expression of the face. If the disease passes it was the *medicine* that worked the cure; if the patient dies, the doctor with the prescription did his duty.

And then comes the host of chronic patients. They can often be relieved. But that would cost trouble and thought. It is, therefore, more convenient to write a prescription, *Ut aliquid fiat!* Now and then it is changed. The patient sees that something is done with him, and he is satisfied. Satisfied till he discovers the swindle. Then he applies to another doctor in order to experience the same deception, and so on, and so on, till he gets embittered and throws himself into the arms of the quacks.

Even for incurables our saying is useful. With anxious eye they follow the bold stroke of the pen with which the doctor finishes the prescription! They listen devoutly to his wise sayings, choke down trustfully the bitter draught without a suspicion that their idol shrugs his shoulders when the door is shut and, satisfied with his good deed, says to himself! *Ut aliquid fiat!*

They hope and wait till death steps to their bedside and wrests from their hand the magic phial. Their lack-lustre glance is fixed upon the medicine and the faltering tongue endeavors still to shape sounds of gratitude to the doctor. We accept such thanks as the reward of our trouble.

The jeer of death affects us not. We did our best to the last, and our best is: *Ut aliquid fiat!*

Sacred science has grown a long pigtail. But the profession has a baneful respect for the old deaf lady. It takes real pains to make the dead doctrines of the old crone live, and the public comfort themselves with the harmless creed that there is a difference between being killed by science or by quackery."

So much for the utterances of great medical authorities, which I might easily increase by many pages and which would fill volumes if I were to add those of physicians who have turned their backs upon their science and adopted Homœopathy, or the Natural Method of Healing of *Priessnitz* or *Schroth.*

German readers who take a further interest in opinions of this description are referred especially to the highly instructive "Kurbilder" by Dr. *Krueger-Hansen,* who discusses in that work and in its supplement the mischievous productions of medical men in all their possible variations. in obstetrics, epidemics, cholera, dysentery, nervous fever, etc., with great acumen and wields a scourge so powerful and so annihilating that it assuredly would have had greater effect unless, according to the poet's aphorism, "Even the gods fight in vain against stupidity."

See also "MEDICINE, DISEASES ARISING FROM TAKING."

MEDICINE is the name for supposed remedies given by medical men to patients for the purpose of healing.

These substances are taken from the animal, vegetable and mineral kingdoms and generally have a poisonous effect.

What the intrinsic benefit of medicine is to the patient may be seen under "Opinions of Medical Men on Medicine," further under "Natural Method of Healing," as well as in another work of mine: "How to Improve the Times," "General Effect of Medical Science."

MEDICINE, DISEASE ARISING FROM TAKING. This complaint arises from too frequent use of medicine or from the application of unguents, mercury, iodine, arsenic, etc., by which means the system gets undermined and broken up.

TREATMENT.—Daily one, or weekly about three or four steam-baths in bed, or steam-baths succeeded by full pack, to be followed by a lukewarm bath (88° to 90°). A daily tepid wet rubbing of the whole body (72° to 81°), abdominal compress at night, non-stimulating diet and plenty of fresh air out of doors. Pure air in sitting and bedrooms, sleeping with window open. Generally strengthening—in other cases—regenerative treatment. For Modes of Application, see Index.

Megrim, see "HEADACHE"; see also "MEGRIM" under Kneipp cure.

MELANCHOLIA. This term is applied to a certain morbid mental condition, the principal symptom of which is a dejected, depressed state of mind, free, however, from illusions and hallucinations. The causes of it are hereditary predisposition, depression of the abdominal nervous system, mournful, external influences, as grief and care, mental overwork with insufficient bodily exercise, etc. This state of melancholia may, during a later stage of the disorder, pass into mental disease.

SYMPTOMS.—Low, depressed spirits, frequently following upon distressing family events, such as death, loss of wealth, etc., morbid ill-humor. What was a source of happiness and cheerfulness in days of good health now depresses and afflicts the patient. A peculiar feeling of anxiety sometimes takes hold of him. His look is sometimes frightened, sometimes fixed. He pays no attention to his personal appearance or dress. His skin is gray and flaccid, his body emaciated, his digestion disturbed. He is at times very irritable and shows excessive sensitiveness to all external impressions; frequently, however, the reverse is the case.

He displays in one or several currents of thought a mental confusion, manifesting itself in irrational, obscure and unsettled ideas, sayings and actions. He has certain fixed ideas, while in all other respects he is still able to think and act quite sensibly.

TREATMENT.—The same as given under "MENTAL DISEASES."

The application of *Massage* is recommended as under "STRENGTHENING TREATMENT," and "CURATIVE GYMNASTICS" (Group I.) will be of great service.

For further particulars on "MASSAGE," "CURATIVE GYMNASTICS," and Modes of Application, see Index.

Melitura, see "DIABETES."

MENINGITIS, CEREBRO-SPINAL. This disease appears sometimes in isolated cases, sometimes as an epidemic.

SYMPTOMS.—After a short preliminary period, during which the patient feels tired and miserable, the real disease shows itself generally with cold shiverings, severe headache, sickness and fever. The pulse is more rapid than usual. Soon after the illness commences the characteristic symptom of meningitis shows itself; this consists of a contraction, resembling cramp, of the muscles of the neck, which feels very painful if pressed. The rigidity of the muscles of the neck often extends to those of the back, so that the whole spine becomes rigid and is sometimes bent over backward. The patient is dull and suffers from fancies and delirium. The reflections (curvatures) are much increased. Often there is an eruption of the skin, cramp of special groups of muscles,

inflammation of the middle of the ear, or of the eyes, and an enlargement of the pupil on one side.

TREATMENT.—The best thing is to give a steam-bath in bed as soon as the illness is recognized or seems probable; sometimes the disease can be nipped in the bud thereby. Afterward the treatment should be chiefly derivative; alternate abdominal and leg (calf) packs with hot-water bottles to the feet; on the forehead and neck soothing compresses (58° to 64°), to be changed as soon as they become warm. If fever is present a suitable fever treatment should be adopted, and as every movement will give the patient pain it is better to wash him in bed. Give plenty of fresh water and lemonade, even some stewed fruit is allowable. For the first few days nothing to eat, afterward thin oatmeal gruel and, by degrees, advance to non-stimulating diet. For general strengthening purposes, full massage and, when practicable, massage of the neck.

MENSES, SUPPRESSION OF THE, is in persons who are of such an age that these should appear regularly the result of severe illness, such as chlorosis, anæmia, etc.; it may also be caused by change of climate. Of course, the suppression of menses in consequence of pregnancy has no connection with this.

TREATMENT.—Removal of the causes and, above all, strengthening treatment, taking care to get plenty of fresh air by day and night.

See also "WOMEN, DISEASES OF."

Menstruation, see Index.

Menstruation, Age at which it Begins and Ends, see Index.

Menstruation, Bandage for, and its Importance, see Index.

Menstruation, Disordered, with Nervous Pains, see Index.

Menstruation, Disturbed and Irregular, see Index.

Menstruation, Excessive, see Index.

Menstruation of Anæmic and Hysterical Girls, see "WOMEN, DISEASES OF."

Menstruation, Proper Mode of Living During, see Index.

Menstruation, Suppressed, see "WOMEN, DISEASES OF."

MENTAL DISEASES. In treating of this class of maladies we follow the description of Dr. *Kahlbaum,* a specialist in mental diseases.

1. Melancholia is a morbid condition of mind expressing itself by a dejected countenance; the patient is dominated by sad feelings, thinking and acting under the impression of desponding sentiments. In some

cases the person afflicted with melancholia remains quietly brooding, as if depressed and paralized by a morbid humor (passive melancholia). In other cases he is driven to despair by inward suffering and impelled to suicide and destructive actions (active melancholia).

2. Mania, madness, raving madness. The patient affected with mania often presents the appearance of extreme cheerfulness; the mind is continually active, his thoughts quickly ripen into consciousness, one idea involuntarily suggesting another (association and connection of ideas) and all this with unwonted richness of expression and great flight of fancy. Control over the organs of speech is greatly weakened and the patient is unable to have anything passing in his mind unspoken and it, therefore, rushes out in an uncontrollable stream. His thoughts partly manifest a happy disposition of mind and partly exaggerated self-consciousness, but mostly display a great variety of ideas and interests. His muscular movements possess extraordinary elasticity, he develops unusual power and endurance, defying all fatigue (raving madness).

3. Confusion of thought, imbecility, insanity; the patient frequently exhibits in this form some of the characteristics of mania, especially increased self-consciousness, but in this case his ideas run in one and the same groove (fixed ideas), or again his mental disturbance takes a form akin to melancholia, while in other cases his disposition bears the character of indifference. At the same time his ideas are distinguished by a certain diversity and recognized as morbid productions partly by their inappropriateness to the meaning intended to be conveyed and partly by their want of connection and their general confusion.

His actions do not undergo any very marked change, except that they are unseasonable and out of place, or they correspond more with the mental disposition and the idiosyncrasy prevailing at the time.

4. Dementia, imbecility, idiocy. These forms are characterized by feebleness of all the mental faculties. The sufferer thinks but little or not at all (poverty of or absence of thought); his memory is weak, his disposition is marked by indifference (absence of any sympathetic feeling whatever). Indifference, feebleness of imagination, the mind a blank, the instinct of movement gone. The patient only vegetates. These four forms, however, must not be looked upon as four distinct diseases, but only as different stages of one and the same affection, *viz.*, madness or insanity. Melancholia is the first stage with the primary but continually increasing symptoms. In mania the symptoms are most violent; in imbecility they have already lost their vehemence in a great measure, and in idiocy the stamp of finality is impressed upon the disease. This is the general but not uniform course of the malady. It may begin with mania, pass into melancholia and lead to restored health.

or, after a short-lived recovery, break out again into mania, or again even imbecility may occur first, change to mania and ultimately lapse again into permanent idiocy.

CAUSES.—Insanity is often the legacy of previous diseases wrongly treated; other causes are: family troubles, unfortunate money-speculations, monotonous mental occupation, cares and grief, etc., or disease of or injury to the brain or to its membranes, vessels and covering.

Also inherited predisposition, indulging to excess in spirits, tobacco and opium, the latter sometimes in the form of subcutaneous injections of morphia.

TREATMENT.—Remove everything, in the first place, that might injuriously influence the mind, next a kind, but determined control. Non-stimulating diet and plenty of fresh air. If possible, occupation on a farm, sleeping with open window. Every day or every other day a foot or partial vapor-bath in or out of bed, lasting from thirty to forty-five minutes, succeeded by cool (54° to 65°) wet rubbing of the feet and legs, and next a warm (95° to 100°) hip-bath daily for from twenty to twenty-five minutes, succeeded by tepid (72°) wet rubbing of the feet and abdomen. Moreover, detergent rubbing may be applied now and then and lukewarm (84° to 85°) baths, with gentle affusions and, if the patient's strength permits, stimulating partial or three-quarter packs, or the same steam-bath in bed may be applied from two to four times a week.

See also "MELANCHOLIA" and the article "MADNESS WITH EXALTED IDEAS," in order to know how to avoid as much as possible the initial stage and the causes of mental diseases.

In general one must not be too optimistic in mental diseases. Recovery from these diseases must be looked upon as the exception.

KNEIPP CURE.—Hayseed shirt, once a week, or Spanish cloak. A foot or partial bath daily. Wet stockings at night.

CURATIVE GYMNASTICS.—If the patient is able, let him go through Groups IV and V once a day.

TREATMENT BY MASSAGE as in the case of strengthening treatment with special reference to the forehead and throat, as indicated under "BRAIN, HYPERÆMIA OF THE." The application of magnetism by an expert is effective here, when combined with the above treatment. For the rest, the rules of strengthening treatment and sometimes curative gymnastics are to be adopted and applied. For Modes of Application, see Index. See also "MASSAGE," "CURATIVE GYMNASTICS" and KNEIPP CURE in the Index.

CURE OF MANIA AND RAVING MADNESS.

By Mr. RICKLI, Natural Healer.

Miss *B. H.*, aged seventeen years, of good family, living in Triest, assumed suddenly last November for several days a shy, reserved manner, at the same time talking very strangely. This condition soon developed into the delusion that she was being persecuted, which increased to such a degree that she completely locked herself up, dragged with the strength of a giant the heaviest pieces of furniture to the door for the purpose of a barricade and finally crept under a low bedstead. This state culminated in raving madness. The parents were very anxious not to send her to a madhouse and, having already had several proofs of the efficacy of the Natural Method of Healing, the patient was entrusted to my care to be treated in her own home. She was afraid of everybody, abused her own mother fearfully and struggled so hard when she was required to take bodily exercise that four strong women were unable to move her from the spot.

I saw at once that with mere cold applications there was nothing to be gained here, for how could warmth be produced with an obstinate refusal to stir, particularly as she was by night and day extremely restless in her bed or even jumped out of it. As in the case of most people in the incipient stage of insanity, I conjectured congestion or determination of blood to the brain to be the primary cause of the affection, the more so in this instance as the feet and legs half way up the calves were white and cold.

I, therefore, ordered the application of vapor to the soles of the feet in the first place, as illustrated in my pamphlet "Steam-baths in Bed and Partial Vapor-Baths." When I ordered it, I had great doubts about the possibility of having it executed, seeing that four strong women could not move her from the spot. The parents, of course, wished me to personally superintend the application. When the steam-bath was ready I walked quickly and with steady eye up to the patient and commanded her in a peremptory tone: "Now, come at once." Then I seized her arm with one hand and with the other pointed to the bed. The demeanor on my part overawed her and she followed like a lamb, quietly allowed the lower part of her body to be bared and got into bed, not, however, without a flood of abuse during the whole time of the bath, which lasted for three-quarters of an hour. After this bath of 112°, when her lower limbs were thoroughly warm and had partly assumed a red color, I had them rubbed for five minutes vigorously with towels first dipped in (59°) water and then well wrung out.

Then she was quietly dressed and left alone. She had vapor-baths to the soles of the feet in the same way for three consecutive mornings, then three lower thigh vapor-baths and three leg vapor-baths, given alternately every other morning; finally she had three partial vapor-baths (reaching to the lower ribs), one every other morning. She was as stubborn at the last leg vapor-bath as at the first, but with the first partial vapor-bath she became more quiet and in the last remained perfectly tranquil.

She became more subdued and reasonable in the intervals between, in proportion as the vapor-baths had a calming effect upon her.

When I went to see my patient on Christmas morning the happy mother received me in the passage with the words: "You could not have given us a more beautiful Christmas present than curing our daughter's madness."

Any application could henceforth be made to the patient without resistance. Swelling of the glands soon after appeared on the neck and throat, which I welcomed as indicating a healing crisis. In the course of the treatment they subdivided, and the patient entirely recovered to the joy of her parents and to the glory of our Natural Method of Healing.

A similar, but still more obstinate case of madness than the preceding one, was that of a young married woman who had become mad eighteen months before, consequent upon the sudden loss of two of her children. The insanity was characterized by frequent verbal abuse, by suddenly putting out her tongue, uttering a terrible scream at the same time, and if anyone came unawares too near her bed, she would scratch or bite his hands or throw something at his head.

On the other hand, she kept perfectly quiet in the vapor-baths, so that from the second day one partial vapor-bath could be applied, which, together with partial sun-baths, played the principal part in the treatment of this case also. After the former, she had always partial wet rubbing of the lower limbs, as far as the vapor had come in contact with her (68° to 54°); after the latter, partial baths of the lower extremities (82° to 77°), bathing of the upper part of the body at a temperature of 90° to 92°. When the weather was bad, she had warm (97° to 102°) hip-baths, lasting twenty-five to thirty minutes, succeeded by cool lavations of the abdomen and alternating with leg-baths, followed by cool sponging. The patient had now and then at night stimulating lower thigh-packs, abdominal compresses or half packs; but they did not react well, as they excited instead of soothing her, and they had, therefore, to be discontinued. The condition of her digestive organs and her small capacity

for bodily exercise did not allow of a vegetarian diet, which had been strictly enforced in the previous case.

At the end of the second month of the treatment, this patient also, whose mind was once shrouded in darkness, had become perfectly calm and clear-headed again and could be discharged.

MANIA AND RAVING MADNESS.

By Dr. Bylfinger.

The constant increase of mental diseases is one of the scourges of modern society. I am aware that many specialists assert, that there were as many people mentally afflicted formerly as there are now, but that less notice was taken of them then. There may be some truth in this, but, on the whole, the terrible increase of this kind of malady cannot be disputed. It is a thing very easy of explanation when we consider the unnatural conditions of modern life, more especially town-life, with its restless and exciting activity.

Radical relief from these evils can, therefore, only be obtained by a mode of life, at once consonant with and agreeable to nature.

As, however, these diseases do exist in our midst, I must, speaking from the most varied experience, most emphatically raise a warning voice against the customary use of poisons, such as morphia, chloral, and others, the final results of which are, in most cases, lamentable in the extreme. On the other hand, I can most warmly recommend a confident, but intelligent application of the Natural Method of Healing in these cases, however desperate they may appear, having seen such wonderful and rapid cures as a result of this treatment.

A few cases of recent experience to attest this:—

First of all, an instance how these cases should not be treated: A medical student, of Herculean build and of a thoroughly healthy family, in which, so far as is known, a case of mental disease had never occurred, fell ill shortly before his last medical examination with an acute fit of raving madness. He had been studying for twelve months in Berlin, where he had lived very abstemiously and worked hard, and shortly afterward returned to Tübingen where he prepared for his final examination, and was suddenly taken ill after a students' drinking bout which had been rather of an exciting character, owing to one of the revellers having won a prize in the state lottery. The outburst of the disease was like a flash of lightning from a blue sky. He smashed the windows, ranted about *Kant, Plank* and *Hegel,* and could only with difficulty be restrained by his companions.

The doctor who was called, could give no better advice than to have him at once removed to an asylum. I am sorry to say that I was informed of the case by a relative of the patient, for the purpose of giving a certificate, only when the removal to the asylum was an accomplished fact. I declared at once that there had been no need to send him there in such a hurry,—I was afraid the young man would not leave the asylum in complete health, by reason of the medical treatment usually adopted at the place.

Alas, this prediction of mine was confirmed to its fullest and most melancholy extent.

Six months later, as there was no improvement in the patient, his father requested me to go myself and see his son at the asylum. I went there one fine spring day and met the patient in a small yard where he was confined with some thirty imbeciles. He had known me formerly very well, but did not recognize me. I invited him to come out with me into the large garden close by, to which he consented after some hesitation. I walked about in the garden with him for about an hour, during which time he evidently awoke from his lethargy, for his answers to my questions gradually became more distinct. On my inquiry, how he was being treated, he ejaculated:

"Oh, I have injections in the evening; they don't hurt."

I was thunderstruck and could not conceive that it was possible to treat a patient of this kind with injections of morphia.

The attendant, however, and afterward the physician himself, confirmed his assertion. With this, I had the key to the whole situation.

The patient had, from the beginning of his malady, been treated every evening with injections of morphia. Incredible, but true! I had his bedroom shown to me. It was a small apartment, in which, besides the attendant, two other patients slept, who also—perhaps to prevent the man's rest being disturbed—were dosed with morphia every night. To my question, how it was that there was such an unpleasant and disgusting smell in the place, the man answered that all three patients belonged to the dirty class,—a natural consequence of continually blunting the nerves with this infernal morphia.

I was sick of the whole business and sadly returned home. Here was a young man, full of hope and promise, representing a large capital to his family, and for whom his father had, on that account, shunned no expense whatever,—medically treated in such a monstrous, such a perverted way in a public institution, supported by the State. The thought entirely unnerved me.

And the end? A young, hopeful life, the pride of all his family, perished miserably after twelve months' sojourn in the lunatic asylum as

an imbecile and as a victim to privileged poisoning with medicine,—of poisoning than which I could not imagine a more destructive mode.

The following two cases may serve as bright contrasts (both having been treated by the Natural Method of Healing):

First—A highly educated lady, aged about thirty, who, in her childhood, had been adopted by a family in this place, and whose two sisters had already been confined in a lunatic asylum for nearly ten years as incurables, was suddenly seized a short time ago with religious mania, and ran away from her home, "because her papa loved her in a different way from that permitted to a father." When I arrived, I found her in bed, chanting and praying, with a deranged, rapt expression of face. The excitement increased during the next two days to such a pitch, that she went entirely out of her mind, believed herself to be Christ, rushed into the road at night, and had to be taken home in a cab by the police. screaming from time to time and raving in such a manner that I almost began to lose courage, and I could not blame her father for wishing her removal to a lunatic asylum. Having, however, the previous case in my mind, I tried to persuade him first to try the experiment of sending her into the country, in charge of an attendant who had been trained by me, and where she could further be treated with the Natural Method of Healing. He consented, and after the second day she became more quiet. gradually began to eat again, slept for some hours, gradually lost her hallucinations, and upon my seeing her a few days after, talked quite sensibly to me, and took a quiet walk with me; while after another fortnight, she was able to return home, completely restored to health.

What was it, that effected this miracle?

(1) Sensible mental treatment;

(2) Non-stimulating diet;

(3) Fresh air;

(4) Principally, however, the proper application of water, *e. g.*, cool trunk-baths, *Kuhne's* board-baths, short, cold partial baths, trunk and calf-packs, combined with hot-water bottles in bed, afterward knee, thigh and upper affusions, and, when the patient was better, plenty of walking with bare feet.

A fortnight ago she paid me a visit; she was quite herself again, well and cheerful and full of spirits,—the same young lady who, six weeks before, behaved in such a manner as to give rise to the fear that she, like her two sisters, would have to be buried alive in a madhouse!

Second—A lady of one of the foremost families here, aged about thirty years, recovering from hebdomadal typhoid fever, had suddenly, without the slightest premonitory symptoms, a fit of mania. She had

already suffered for some time with chronic constipation, and now and then showed signs of a peculiar irritability, inherited from her mother, who had been known to suffer from weak nerves.

One day I could attest that the fever had left her, but when I came the next day, I heard her, hitherto a very quiet lady, scream violently and rave as I reached the ante-room. On entering, a terrible picture met my eyes—the patient had a highly flushed face and, on the slightest occasion, struck out with hands and feet, screaming so as to be heard down the street. Before anyone was aware of it, she jumped out of bed and rushed into the passage where she fell down helplessly.

Next day, she was quieter, but her mental aberration had increased; she considered herself cursed, accused herself of irreligion, thought that God could not forgive her, etc. But she also, again, had her intervals of mania, displayed decided symptoms of nymphomania, and the following two days presented the picture of extreme insanity. She no longer recognized anyone, was quite ecstatic, stared at everyone with eyes wide open, tried to throttle herself and others, and then wept again in a very affecting manner. In spite of the apparently hopeless situation, I did not lose courage, I caused a number of T and calf-packs to be given her with hot-water bottles to the feet, ordered several 77° trunk-baths daily, and—wonderful to relate—insanity disappeared just as it had come. By the third day, the patient had got calmer, and began to recognize her surroundings; fear certainly overcame her now and then in consequence of hallucinations, but after a week, that also was over. She slept again, her appetite returned, and her tongue became clean. She could converse again, as before, and on the tenth day, was able to sit for some hours on the veranda. Surely, a better result could not be desired.

In my opinion, all such diseases are based essentially on poisoning with so-called septic poisons, engendered through disturbances of digestion, and causing a determination of blood to the brain and an irritation of the cerebral cells. The principal task of the doctor is, therefore, to draw the blood away from the brain and to remove the septic poisons from the system.

The correct application of the Natural Method of Healing effects this in a truly miraculous manner.

How mistaken, however, in this respect the so-called scientific medical treatment is, the above-mentioned case of the medical student proves with startling clearness, and further evidence of it is furnished by the dictum of a practising specialist and senior assistant physician at a public lunatic asylum who said when visiting me the other day: "Nothing can be done with water in mental diseases."

The two cases quoted above, prove, however, exactly the reverse, and it is to be desired that into our madhouses, in which the hypodermic syringe secretly fulfills its destructive tendency, a ray of light may soon fall,—for the new treatment alone is capable of releasing humanity from untold misery and wretchedness.

CURE OF MENTAL ABERRATION.

(From Dr. KOERNER'S book.)

My daughter suffered with mania so severely that she could get no rest, either day or night, and was quite uncontrollable; I was advised in consequence to apply to Dr. *Koerner*, who had often cured insane persons by the Natural Method of Healing, and happily, the treatment acted so quickly that in four days she was again in the full possession of all her faculties. *G. Bush*, Sailor.

CURE OF MADNESS.

By F. HARNISH in Chemnitz.

(An extract from the Journal of the United Societies for Natural Healing.)

Mr. *M....tz* in Au....lde near Chemnitz, a stocking manufacturer, aged forty-eight years, had been hitherto in tolerably good health. He became unwell at the end of December, the tonsils of his throat being swollen. The doctor who had been called in, treated them with hot compresses and various medicines, and, according to what his family told me, they soon disappeared. But immediately afterward insanity developed. The soporific which the physician prescribed for this affection, was, however, not taken, his friends being afraid that it might do him harm. As his condition got worse and he began to rave, they were obliged to chain and tie him down, and two attendants had to be with him night and day. This case was at last officially reported to the district physician, and the family, at the same time, asked his advice on the case. He confessed, however, openly and honestly, that there was no medical remedy for a case of this kind, whereupon they put the question to him, whether there was any hope in the treatment by the Natural Method of Healing. He expressed himself to the effect that, though he had had too little experience of this treatment, he did not doubt that help might be possible from that source, but that they should apply to an experienced man, and as far as he was concerned, he was in favor of waiting for the development of the disease, before making a further report.

The patient's friends sent to Chemnitz for a Natural Healer. On the advice of an old business acquaintance of the patient, a Mr. *C..s*, Mrs. *M....tz* applied to Dr. *Meyner*, a natural healer, who was prevented, however,—as he already had too much to do in his native place,—from

going to see the patient. Thus it was that they came to me. I, too, was much engaged just at the time with smallpox and other serious cases, but promised to go next day. I found the patient, at the appointed time, in company with Mr. *C..s*. He was lying strapped down on his bed, and five or six men were round him. I was then informed of the details of his case, as given above.

The patient did not answer any question I put to him. I could see by the peculiar working of his facial muscles, that it was a case of insanity. The pulse was about sixty to the minute, lungs and heart were in normal condition, nor did his abdomen show any striking irregularity, his feet were cool, the head somewhat hot. Stools were scanty and discharge of urine irregular.

Appetite and thirst were entirely absent, and only during quiet intervals had they been able to force some nourishment upon him. When I caused his shackles to be taken off, he became very restless, struck about him and raved excessively. It was only by degrees that he became calm again of his own accord.

The plan of treatment consisted mainly in tepid baths and vigorous dry rubbing of the whole body (performed by several men) and cool back affusions, after which he was wrapped in a woolen blanket and again thoroughly rubbed; also dry packs (which produced highly evil-smelling perspiration) and detergent foot-packs, with frequent enemata when the head got hot, cooling head-compresses and fresh air (window open). All this was repeated two or three times a day. Afterward, exercise in the open air, under the supervision of an attendant, which caused him to sleep well. After a very short time, an extraordinary improvement took place in the patient's condition, and Mr. *Harnish* himself writes: "I paid my last visit on March 15th, and found my patient quite well." Mr. ***M...tz*** himself came to see me later on; he looked extremely cheerful and to be in good health, nor has any symptom of his former affliction shown itself. How many such patients drag out their lives in lunatic asylums, who might so easily at the outbreak of their affliction have found relief in our Natural Method of Healing, as the above case clearly proves.

Mercurial Poisoning, see "POISONING."

Mergotis, see "ERGOTISM."

METASCHEMATISM. This term is used to denote an entire change and transformation in the character and form of a disease.

METASTASIS is the transposition of a disease from one part of the body to another, also the conversion of a general form of a disease into a local form.

MILIARIA is a cutaneous eruption, appearing independently, *e. g.*, with profuse perspiration, or associated with other diseases, as typhoid fever, acute rheumatism, puerperal fever (in consequence of lying too warm), etc., or, again, epidemically, belonging in this case to the same class as measles, scarlatina, etc.

TREATMENT.—First of all, regard must be had to the causes; next, the patient is to be kept in an even temperature, great attention being paid to the skin by one daily full or three-quarter steam-bath in bed; if there is fever, then oftener; for children, only one hot-water bottle should be used, to be succeeded by a lukewarm (86° to 88°) bath or (72°) lukewarm, wet rubbing of the whole body. The inflamed parts may be sprinkled occasionally with violet powder; non-stimulating diet, fresh air, and open bowels (by means of enemata). See also "MEASLES," "SCARLET FEVER," etc. For Modes of Application, see Index.

MILK. From the fact that milk is, or ought to be, the exclusive article of nourishment of children as well as of all mammalia, during the first months of their existence, we see that it contains all the materials necessary for the formation and growth of the body.*) Milk is, therefore, one of the best articles of nourishment that we possess.

We give a table showing the constituent parts of the kinds of milk most commonly used.

	Water	Fat	Casein and Albumen	Sugar of milk	Residue
Cow's milk	87.7	3.5	3.7	4.4	0.7
Goat's milk	86.9	4.0	3.9	4.4	0.8
Mother's milk	87.9	3.3	2.6	5.7	0.5

Milk should, therefore, not only form the exclusive article of diet for infants, but should be an important constituent of our nourishment in later life. It should, therefore, be added to the food, or drunk between meals, in all cases in which it is desired to increase a patient's strength, or to improve the condition of the blood and the humors by means of a somewhat more nourishing diet, as in convalescence after exhausting diseases, such as scarlet fever, diphtheria, typhus, etc.; also after painful deliveries, or in scrofulous, rickety, and consumptive subjects.

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*) Milk is produced in the lacteal glands. The secretion of milk commences at the birth of the offspring, and continues during the whole period of suckling, nine to twelve months or even longer. The secretion of milk ceases with the occurrence of a fresh pregnancy.

The milk secreted immediately after birth is thin in quality and contains comparatively few solid constituent parts. It is often withdrawn and thrown away before the child is put to the breast under the mistaken idea that it is of little value, whereas this watery milk is specially adapted by a wise provision of nature to the digestive capacity of the child during the first days of its life.

We now come to the question: "Ought milk to be drunk fresh or boiled?" The best and the right way is, of course, to drink it as nature provides it, fresh; and experience has shown that fresh milk is more readily drunk, better tolerated and more easily digested than milk which has been boiled. The practice of boiling milk owes its origin mainly to an exaggerated dread of bacilli. It is supposed, of course, that any bacilli in the milk will be destroyed and rendered harmless by the process of boiling. As if all men, in spite of every precaution, did not constantly breathe air laden with myriads of bacilli, in the streets and in public places, theatres, concert rooms, public houses, etc., without any harm resulting to their health, except in cases where the system has been weakened by other causes and the soil has been, as it were, prepared for the reception of the germs of infection. See the article on "BACILLI."

The exaggerated dread of bacilli is, therefore, uncalled-for in the case of milk. Any danger likely to arise from the presence of a few isolated bacilli in milk is more than compensated for by the greater palatability and digestibility of fresh milk.

Many people say they are unable to take milk because it produces a feeling of discomfort in the stomach. But this only happens when people, whose stomachs are naturally weak, suddenly take to drinking milk in large quantities, *e. g.*, a tumblerful at a time. Under the action of the acids in the stomach, the albumen in the milk is coagulated into a lump, only the upper part of which can be acted upon by the gastric juice. The presence of this mass in the stomach for some length of time gives rise to a feeling of pressure and pain in that organ. We, therefore, recommend to those suffering from weakness of the stomach, to drink milk, a mouthful at a time, and to eat a little bread at the same time. By this means the milk is more evenly distributed and prevented from coagulating into lumps; it is then more easily digested and causes no discomfort. In this manner, this excellent article of food can be digested by the weakest stomach. For infants and small children, by whom milk taken alone is not well borne, and in whom it is apt to cause discomfort, the milk should be mixed with a little groats or water-gruel, for the same object.

Thick and curdled milk can also be recommended. It is more easily digestible than fresh milk, because the first stage of digestion, the coagulation of the albumen, is already accomplished. Moreover, it has a favorable effect on the activity of the bowels in those who complain of a tendency to constipation after drinking fresh milk.

It is, at all events, desirable that the drinking of milk should come more into vogue in towns, and that people should cease to regard milk as an article of food only fit for infants. In many families it would be

better for mental and bodily health, as well as for the pocket, if milk were substituted for pernicious alcoholic beverages.

Milk Diet, see Index.

Milk Fever, see Index.

Milk for Babies, see Index.

Milk, Insufficient Formation of, see Index.

Milk Puddings (Various), see Index.

Milk Scab, see "SCALD HEAD."

Milk, Scalded, see Index.

Milk, Sudden Suppression of, with Fever. See "WOMEN, DISEASES OF."

Mind, Wandering of, see "DELIRIUM."

MINERAL WATERS, VALUE OF. Dr. *Monse* of Altheide (Silesia) writes in the "Natural Healer" as follows:—

"In water lies salvation." This motto is pompously inscribed over the springs at speculative health resorts, and more or less reliable reports of alleged successful cures are issued forth with a view to induce the public to make use of this or that mineral water. And a large number of doctors condemn their patients, after having tormented them for a whole year with all kinds of physic, to spend the summer in drinking quarts of some mineral water or other, every day. Although doctors of the more modern school begin to show signs of revolt against the stereotyped practice of sending patients to watering places, yet it will be long, we fear, before this antiquated prejudice dies out, and a more intelligent generation effects a reduction in the receipts of the owners of those establishments. Though my purpose is to point out the injurious effects of mineral waters in general, I am alluding more especially to those containing carbonic acid. During my four years' practice at watering places I have had abundant opportunity of forming an opinion as to the real value of mineral waters.

The waters containing carbonic acid, more especially the chalybeate waters, all suffer from the disadvantage of being difficult to digest. Gastric troubles, especially when food containing acids is partaken of at the same time, and constipation are scarcely to be avoided. If we further bear in mind the luxurious fare provided at the restaurants, it is no wonder that the "Doctor at the Spa" finds most of his time taken up with the treatment of the disorders occasioned, in the first place, by the "health-bringing" mineral water.

A far more serious result is the stimulation of the action of the heart, observed in the majority of cases. Sleeplessness is liable to occur in con-

sequence of the free use of baths and the extravagant amount of water drunk, and I have been assured by ladies that they had had scarcely any sleep during a six weeks' course of treatment. The doctor, when his patients complained of feeling miserably out of sorts, pointed to this symptom as a sign of the favorable effect of the water, and consoled the patients by telling them that they would feel the good results of the treatment when they got home. Well, at home they were not exposed to the injurious influence of the water; the mischievous "course of mineral water" ended like everything else, and sleep returned. As anæmic and nervous persons form the majority of those taking the waters, this excitement of the heart constitutes a more dangerous symptom for the physician to contend with, than the troubles they brought with them. It is a most serious matter when heart affections appear. In such cases the use of the waters must be peremptorily forbidden; and the question naturally arises, why some people are sent to the waters at all? How often doctors are to be blamed for sending people to watering places, who are utterly unfit for this kind of treatment, can, of course, never be known; the doctor at the "Spa" is silent on the subject, from a feeling of loyalty to his colleagues, and the owners of the springs for pecuniary reasons. The mania for speculation reaches its highest point here. It would be a matter for laughter, were it not for the sad amount of suffering caused by it. The speculative bath proprietor and his assistants calculate the percentage of the various healing agents present in the water to the tenth place of decimals, and cry them up as the cure for all possible human ills, though all the time they are convinced of the contrary, and the healing waters receive the authoritative approval of the medical profession. *Mundus vult decipi, ergo decipiatur.* (The world wishes to be deceived —let it be deceived then!)

In addition to digestive disturbances and sleeplessness, I observed acute hemorrhage from the lungs in several cases of lung disease, though the waters were only moderately indulged in, so that they had to be at once discontinued. The patients in question had consequently to remain without any treatment, and were all the better for it! And yet, they had been sent for the purpose of drinking the waters.

Another, and perhaps the worst, feature of the treatment we are considering is the senseless drinking of enormous quantities of water ordered by the "Spa doctor." How many people have not acquired fatty degeneration of the heart, through an immoderate supply of fluids, and how many have not so diluted their blood by excessive water drinking as to predispose the system to every sort of disease. And this mischievous practice is actually enjoined at watering places. How many corpulent people have not been seized with apoplexy, in consequence of excessive

give it a trial." A discussion then followed, in the course of which I mentioned, among other things, that iron, which he had prescribed without any result, was entirely useless. The doctor sprang to his feet, as if he had been stung by a snake, saying: "You young coxcomb (I was then thirty-three years old), how can you tell an old practitioner like me that iron is of no use." And after a few more amenities of the sort, he took up his hat and stick, and went away, without listening to my friendly invitation to leave disputed points alone and consult with me as to what had best be done with the patient. I was, therefore, left alone, and consoled the patient, as well as I could, for the loss of his "family doctor of eighteen years' standing," principally by curing him completely in seven visits (about three weeks).

I laid the greatest stress on simple, wholesome food and good, fresh air, directing the patient to spend all his time, during the day, out of doors, and to sleep with open windows. An abdominal compress was ordered to be worn at night, and a lukewarm, wet sheet to be applied in the morning. With these simple means I effected this rapid cure. Some time afterward, on the occasion of another visit to Mitweida, I met a number of gentlemen at breakfast in the Hotel "Sächsischer Hof," and had the gratification of being introduced to these gentlemen, among whom was our friend "the family physician of eighteen years' standing," by my former patient as the saver of his life.

MORTALITY, STATISTICS OF. In 1882, on the completion of the twenty-fifth year of its existence, the greatest, that is to say, the most widely known life insurance company in Prussia, the well-known Germania in Stettin, compiled statistics of the mortality in various callings, based upon its experience of twenty-five years. The journal for "German Insurance" published in a double number for April-May, 1883, the statistics of the Germania, giving the following numbers:

Teachers	83.36	per	cent.
Railway officials	87.04	"	"
Bakers and confectioners	88.23	"	"
Shoemakers	92.25	"	"
Tailors	97.69	"	"
Station and office officials	108.22	"	"
Stokers and engine drivers	109.25	"	"
Railway guards	111.89	"	"
Miners	126.23	"	"
Butchers	130.20	"	"
Publicans	172.01	"	"

Vegetarian Review.

MORTIFICATION is the local death of any part of the living body. In consequence of the absolute cessation with respect to any part of the body of the circulation of the arterial blood, by which, as we know, nutrition is maintained, the organic functions in that part are extinguished and mortification ensues.

The disease is distinguished by various forms, according to the symptoms and causes:

1. **Hot Mortification.** This form makes its appearance rapidly and with inflammatory symptoms. It is of all the different kinds the least dangerous because the inflamed edges of the wounds do not exercise a destructive influence upon the surrounding parts, and the affected part may by proper treatment be restored to its normal state.

2. **Cold Mortification** appears without any inflammatory symptoms and destroys all organic life in the part affected. It may also appear as *moist mortification,* with moist, decaying disintegration; or as *dry mortification,* when the affected parts slowly dry up, wither, and shrink.

3. **Hospital Mortification, or Gangrene.** This disease is only so called because it was first seen in hospitals in which—by reason of the patients being overcrowded and the rooms left unaired—a loathsome smell and uncleanliness arose. In most of the hospitals of to-day scrupulous cleanliness and excellent ventilation are the rule. But as among the lower classes unwholesome air and uncleanliness are not unfrequently to be met with in their dwellings, "hospital" gangrene of a malignant type is also found in private habitations.

This disease is contagious, and excessively painful and dangerous, because the ulcers spread. Only the outer edges of the wounds have a red appearance, the gangrenous places are dirty-white spots which pass into suppuration. An acrid, bloody matter excretes from the sores. If the gangrenous places begin to scale off gradually and the discharge decreases, it is a sign of healing, that the disease is less virulent and that a cure is possible. But it by no means unfrequently happens that, in consequence of high fever, repeated hemorrhage, etc., complete destruction and dissolution supervene.

4. **Mortification of the Toes** is a dry kind of mortification, which suddenly and accompanied by violent pain, attacks the toes. Aged and infirm people and those afflicted with gout are subject to it, because they can take but little or no walking exercise, and the action of the heart being weak it cannot drive the blood to the extremities. Mortification of the toes has a fatal termination.

5. Mortification in the Aged is the form, the course of which is least painful and which attacks the aged only. The process nevertheless is very serious since all life vanishes in the shrivelling, leathery, drying portions, and death may ensue with a rapidity proportionate to the spread of the disease. The causes are the same as metioned in No. 4.

Symptoms of the Disease in General.—The part affected with mortification has no sensation and is rigid, in most cases cold and discolored; when organic life is extinguished in it, it passes quickly into decomposition and corruption.

Mortification may either be confined at first within a small compass or it may spread rapidly.

Causes.—Violent inflammation, infection, direct destruction of the tissues—as by burns, bruises, crushing, laceration, cauterization, frost, etc.—also complete stoppage of the artery supplying that part, or obstacles preventing the blood from flowing back, etc., but above all weakness of the heart's action.

Treatment.—In every kind of mortification the greatest cleanliness should be ensured and fresh air liberally supplied; but a very spare, non-stimulating diet should be observed. It is better not to eat at all than to take food or drink in any way unsuitable or excessive, because all bad humors are drawn to the wounds. The remedies recommended are stimulating or soothing compresses, to be frequently changed; washing out the wounds by squeezing out over them a large sponge well filled with water; also frequent washing in the ordinary way with water of 66° to 77° (lukewarm). The sick-room must be often aired and the bandages taken off the wounds must be at once removed from the room. Wine, beer and all heating drinks should be avoided, and a window should be kept open during sleep.

The following treatment may besides be applied if the patient is strong. Steam-baths or steam-baths in bed about every second day, just as they best suit the patient, with bath afterward, and copious washing-out of the gangrenous parts; or, instead, warm baths (78° to 86°) with copious washings-out as before, and, while in bed, lukewarm (77° to 86°), very wet compresses on the wounds. Duration of these latter according to the feeling produced, about from two to three hours. Both forms (the steam-bath and the warm bath) may be combined, *i. e.*, one day the one, the next day the other. When there is no great inflammation, the affected parts may be gently steamed now and then in addition to the washing-out and compress. These local steam-baths are often preceded by a local cool washing or dabbing. For Modes of Application, see Index.

CURE OF MORTIFICATION.

By Mr. Sperling, Natural Healer of Berlin.

H. Lange, agricultural laborer, living in Trena, near Leipsic, eighty years of age, ran a large hard thorn into the second joint of the middle finger of his left hand, and, in the attempt to pull it out, broke it, leaving the point in the flesh. The man, as is usual, put a pitch plaster on the bad finger, in consequence of which the inflammation and pain increased.

Besides this he had the misfortune inadvertently to strike the very place with a hammer when engaged in some trifling domestic occupation, and thereby the swelling, inflammation and pain were, of course, aggravated. The doctor who was called in tried the most varied remedies, one after the other: compresses, embrocations, and such like, and as, notwithstanding these, the case was becoming more critical, he talked of amputation. This induced the patient to have me called in. I found his hand the size of a child's head, the affected arm swollen three or four times larger than the sound one, and both hand and arm looking black. I could hear his heart beat the moment I entered the room and found his feet and legs were cold as far as the abdomen.

As his heart beat so strongly and quickly and as the old man had not had warm feet and legs for years, though he slept under a warm feather-bed even in summer, it was to be presumed that the blood vessels of the heart, etc., had considerably expanded during this long period, that their walls had become attenuated and that, therefore, paralysis of the heart was to be feared if caution were not used. The man's vital power being, however, but small, my action was limited to foot and leg steam-baths—having regard to the condition of his heart—these being followed by wet rubbing of the whole body. Next, as the old man from extreme restlessness could not stay in bed, I was but inadequately able to apply soothing (77° to 86°) heart compresses, and they were put on only whilst I was there. As soon as I had gone away, these compresses, as well as the thigh-packs and the steam-baths, were neglected. The patient, however, carried out my other injunctions during the day-time: cooling, soothing (78°) compresses on arm and hand, frequent bathings (78°) of these parts, and partial sun-baths best taken in the garden in sunshine. It should be remarked here that pains came on directly the water was used a few degrees cooler or warmer. Both the black-looking swelling and the violent inflammation subsided by degrees, the affected finger stood out more and more from the swollen parts and displayed at last six ulcerated wounds which excreted quantities of fetid matter (ichor).

Small pieces of bone also gradually projected from the finger and became after a time so loose that the patient could remove them with ease. The finger then shrivelled and, being but slightly connected with the hand, might have been cut off with a pair of scissors, a process which would have been advantageous for the man, since the stump was only in the way. In view of the possibility, however, that something serious might result to the patient, and that medical men would not have been slow to blame for it, I refrained from doing this, as it was not actually necessary.

For regulating the bowels and as a detergent measure, I ordered three or four enemata (68° to 72°) a day. The throbbing of the heart diminished and finally the man took fewer arm and hand-baths. In four weeks' time the cure was complete and the hand was merely wrapped for some time in a cloth for protection against knocks, etc.

The object lesson which this case furnishes is that even in aged persons, where the vital force is weak, the natural recuperative power inherent in every organic being, requires but help to accomplish a cure and to save, as in this case, a hand, an arm, nay, life itself.

Twelve months later Mr. *Lange* celebrated his golden wedding.

COLD MORTIFICATION CURED IN FIVE WEEKS.

By Herr von SETH, Natural Healer of Bremen.

A cabinetmaker came to see me on May 28th, last year, stating his foreman, *W. Meyer*, 2 Böttcher Strasse, of this city, had for some weeks suffered with ulcers on his left foot, that the physician who treated him had already on three occasions amputated portions of the toes, that the disease nevertheless was getting the upper-hand more and more every day, that heaviness in the head and great anxiety had been new symptoms on the previous night, that the physician in attendance had said to the patient's wife: "Your husband's condition is critical, the disease is cold mortification, which has taken hold of his whole body. Be prepared for the worst. I can do no more good."

The above-mentioned master then besought me to attempt to save the patient. I declared my readiness to pay him a visit after my consultation hours. I found him in a very low state with ulcers on the toes, from which fetid matter flowed. The action of the heart was hardly perceptible and the patient manifested an indescribable anxiety. He also complained of great pains and of heaviness in his head. I ordered at once a lukewarm rubbing—immediately after which a change in the general condition took place—then lukewarm foot-baths and compresses on the foot; half an hour later a full pack (lasting two hours) with all

the windows open; then a vigorous wet rubbing of the whole body, again a foot-bath, and two hours' rest. After this the patient evinced an appetite. He ate some whole-meal bread with fruit and oatmeal gruel; the heaviness in his head and the feeling of anxiety had gone. I next ordered a lukewarm foot-bath, a full pack in two wet sheets combined with an abdominal compress (two hours' duration), and another vigorous wet rubbing of the whole body. After these the pains in the foot had entirely subsided. Next followed another foot-bath, abdominal pack for the night, and next morning a full pack. The same again in the afternoon, when the patient declared that if he did not know he was ill he would hardly believe it now, for he felt quite well. I ordered another abdominal pack for the next night and a daily full pack to be always followed by vigorous wet rubbing. In the third week I was able to remove with my fingers some splinters of bone from the foot, and in another week the wound closed for good In the fifth week the patient returned to his work cured.

MOTHERS, ADVICE TO. There is no position that carries with it duties at once so weighty and pregnant with consequences as that of a mother. And yet the great majority of young women get married without having the slightest notion of these duties, and of the dangers that spring from their ignorance, for themselves and their children. I particularly request young mothers and housewives to read and digest the chapter on "WOMEN, DISEASES OF" and the "APPENDIX," in which they will find instructions and counsels specially dedicated to them; if these be conscientiously followed, health and happiness in their homes will result. See also under "NAP, AFTER DINNER (CHILDREN)."

Motherspot, see "LUPUS."

MOUTH AND GUMS, ULCERATION OF. This malady attacks children much oftener than grown-up people. First of all the gums are attacked by it and finally the mucous membrane of the oral cavity.

SYMPTOMS.—Most offensive breath, the gums turn a deep red, swelling and ulceration supervene. The teeth get loose and sometimes fall out; there appear on the edges of the gums, on the mucous membranes and the tongue, yellow swollen parts in which the impressions or outlines of the teeth are distinctly noticeable. Moreover, discolored, evil-smelling slime is secreted, there is great pain and swelling in the glands.

CAUSES.—These may be uncleanliness, bad food, unhealthy dwellings and various diseases, such as measles, scarlet fever, typhoid fever, rickets; syphilis may also be the cause. It is also infectious and one child often infects others.

TREATMENT.—Gargle from four to six times a day with water (77° to 82°) and wash or syringe the mouth either with water of the same temperature or a decoction of sage leaves. Steam-bath in bed No. 1, with extra compress on the throat once a day. Hereupon bath and neck affusion, further throat-pack (73°) of an hour and a half to two hours' duration must be given in connection with stimulating leg or foot-packs of two hours' duration. Then follows wet rubbing of the whole body (77° to 82°), and a daily bath (86° to 90°) should be taken. Fruit juice and water, or pure water should be used as a beverage, and a cooling, non-stimulating diet consisting chiefly of fruit, etc., should be adhered to.

The patient should have plenty of fresh air, and sleep with the window open. The bowels should be made to act regularly (see "ENEMA"). The mouth of little children who cannot take mouth-baths should be washed out with a soft linen rag dipped in water. For Modes of Application, see Index. See also "KNEIPP CURE."

Mouth-Bath, see Index.

Mouth, Offensive Odor from the, see "HABITS, DISAGREEABLE."

Movements, see Index.

MOVEMENTS, PASSIVE, see Index. Moreover, various movements of curative gymnastics (which see), page 537 and others, to be applied by the doctor to the patient without the latter exerting himself—these may also be termed passive movements. All these movements may be carried out with the assistance of some other person when the patient is either in bed or out of it.

MUCOUS MEMBRANES. The outer skin is directly connected with the inner one, the so-called mucous membrane which covers the interior walls of all the cavities of our body, *e. g.*, it is found in the lungs, where it is called the pleura. The mucous membranes are soft and spongy, containing great numbers of vessels and nerves—they consist chiefly of mucous and connective tissue. The chief function of the mucous membranes appears to be the secretion of slime or mucus, which occurs principally in the mucous follicles, the mucus excreted serves to protect these membranes and to lubricate. If any part of the membrane becomes congested with blood in consequence of a chill, etc., an increased quantity of mucus is secreted and causes what is called catarrh or blenorrhœa, etc., as in the case of bronchial catarrh.

Mucous Obstruction, see Index.

MUD-BATHS are often employed for the purpose of dissolving and eliminating the deposits caused by old chronic inflammation. They are given principally at Marienbad, Franzensbad and Teplitz in cases of chronic rheumatism and gout, often in a very clumsy and indiscriminate fashion, though with temporarily good results. The deposits caused by inflammation are certainly dissolved by the action of the warm mud, but, on the other hand, the system is rendered so sensitive in consequence of the absence of cold applications after the bath that it is liable to catch cold from contact with the first breath of cold air. Every one taking these baths should, therefore, be careful to have a cool or cold wash-down after the warm cleansing bath.

Mud-baths can, moreover, be entirely dispensed with. The objects aimed at can be quite as readily attained by the means at the disposal of the Natural Method of Healing, which have, moreover, the advantage of greater cleanliness. We have general and local steam-baths, we have steam compresses and packs, we have various applications of air and water; and anyone who understands how to use these means properly and adapt them to each individual case will obtain better results than those obtained from the employment of mud-baths.

MUMPS (parotitis) is, with few exceptions, an inflammation of an epidemic character, affecting the aural salivary glands and generally attacking children, except those in the first years of life, frequently also adults, but rarely more than once. The disease is accompanied with stiffness and swelling, first on the left side, but after a few days also on the right. The swelling, more or less painful, is communicated also to other parts.

Other symptoms are: difficulty of swallowing, speaking and masticating, headache, insomnia, lassitude, bad taste in the mouth, indifferent appetite and slight fever.

TREATMENT.—A steam-bath in bed with soothing throat-compress every day, followed by a vigorous, tepid (73°) wet rubbing of the whole body. Non-stimulating diet, fresh air in the room, enema once a day. If these instructions are carried out, a cure is generally attained in two or three days.

The following treatment may also be applied both for inflammation of the aural salivary glands. Tepid (73°) stimulating throat-compress, together with stimulating diet, fresh air and open bowels, enforced, if necessary, by enemata.

If high fever should set in, a 73° soothing three-quarter pack, duration from two to three hours, followed by wet rubbing of the whole body (73°).

Treatment by Massage.—Gently rubbing and stroking first the swollen glands, then the throat, neck and back in a downward direction, succeeded by a steam-bath in bed.

For Modes of Application, see Index.

MUSCLES, THE, are composed of muscular fibres, which, when seen under the microscope, appear as fine, soft, red threads (Fig. 232); they possess the property of contracting and then lengthening again to their normal extent.

***Muscular Fibres* (greatly magnified).**



Fig. 232.

***Muscles Containing Fat* (magnified 600 times).**



Fig. 233.

a) muscular fibres. b) adipose cells.

When we speak of muscles, we generally understand the term to include the flesh attached to them. In Fig. 233 we must imagine muscular fibres, greatly interlarded with adipose matter. They are collected into bundles (fasciculi) which again join with other muscle bundles, which are often intergrown with fat and the muscle fibres themselves are sometimes attacked by fatty degeneration.

Two different groups of muscles are distinguished: voluntary and involuntary; the former are subject to our volition, our free will: to these belong, *e. g.*, the muscles of the arms, legs, trunk, neck, etc., by means of which we can make movements at will.

The second group comprises the involuntary muscles; their action is independent of our volition. To this group belong the muscular layers of the stomach, the intestines, womb and bladder, etc.

The muscles situated in the head are divided again into facial and cranial muscles. The facial muscles are again subdivided into muscles of the eyes, ears, nose, mouth, the maxillary and buccinator muscles; they are apportioned to the external parts of the organs of sense and set apart to close and open the sensory cavities.

The cranial muscles, on the other hand, serve partly for the movement of the scalp and partly belong to the outer ear and lower jaw.

The muscles of the body, consisting of those of the throat, neck, breast, back, abdomen and pelvis, serve to impart movement in all directions (stretching, bending, turning, etc.) to their respective organs.

The muscles of the lower extremities are divided into those of the thigh, leg and foot; they also serve the purpose of movement like the other muscles (bending, stretching, drawing in and out) for the various limbs.

View of the Human Muscular System.

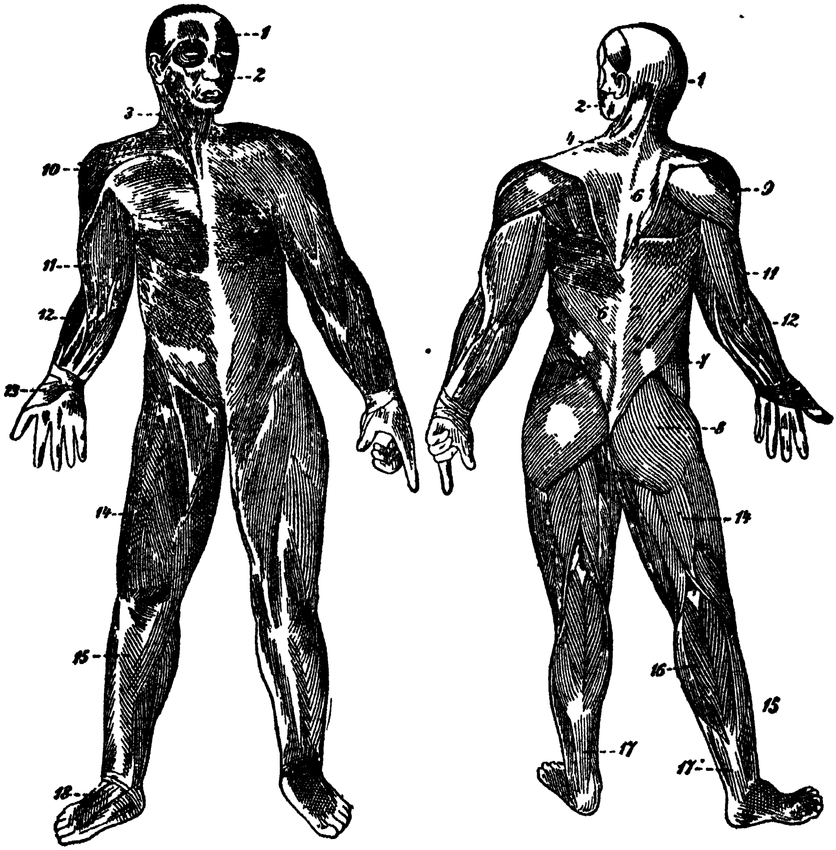


Fig. 234. Fig. 235.

1) Cranial muscles; 2) facial muscles; 3) anterior cervical muscles; 4) posterior cervical muscles; 5) various thoracic muscles; 6) various dorsal muscles; 7) abdominal muscles; 8) pelvic muscles; 9) scapular muscles; 10) deltoid muscle; 11) muscles of the upper arm; 12) muscles of the forearm; 13) muscles of the hand; 14) muscles of the thigh; 15) muscles of the leg; 16) muscles of the calf; 17) tendon achilles; 18) muscles of the foot.

MUSCLES, ATROPHY OF THE. A disease, the character of which has not yet been sufficiently determined. Its course is very slow.

SYMPTOMS.—The muscles shrink almost imperceptibly and without pain. The patient loses the use of one limb after another; the muscles of the fingers are attacked first, then those of the arms, and, lastly, those of the legs.

CAUSES.—Excessive muscular exertion. Also various diseases which interfere with nutrition, such as rheumatism, typhoid fever, syphilis, scarlet fever, etc. This complaint is sometimes hereditary.

TREATMENT.—Avoid above all exerting the muscles. Steam-bath in bed No. 1, three times a week, or steam-baths with pack, succeeded by bath, lukewarm sponge-baths (77° to 81°) or mild wet rubbing of the whole body about twice a day, light massage treatment of the affected limbs. (The legs, however, to be rubbed more vigorously.)

The temperature of the water to be gradually reduced to 66°.

As far as possible non-stimulating diet, plenty of fresh air, sleeping with the window open. In addition, strengthening treatment. See also "MUSCLES, ATROPHY OF THE" under Kneipp Cure. For further particulars on Massage, Kneipp Cure and Modes of Application, see Index. Excellent results have been obtained by the application of the Kneipp Cure, as the following case illustrates.

SEVERE AFFECTION OF THE MUSCLES CURED.

By BOHEIM, Natural Healer, Leipzig.

Mrs. *Kühnitzsch*, widow of a policeman, was given up by her doctors because she would not agree to have her right leg amputated, a thing which they thought essential to save her life. A lady introduced me to her. I confess openly I did not think it very probable that I could save the leg when I looked at it. But she was determined to die rather than undergo an amputation. I had no difficulty with her diet—the woman was poor. Baths and leg-packs, combined with simple massage, were the principal factors of the treatment. The leg, withered in consequence of atrophy of the muscles, quickened, to my great delight, into new life after some weeks; gradual improvement set in and the patient was set on her legs again in six months, a proof that amputation was unnecessary.

CURE OF ATROPHY OF THE MUSCLES.

By Dr. ASCHKE, Principle doctor of the Bilz Sanatorium.

The daughter, aged seven years, of a highly respected citizen of N., was placed under my treatment on June 16th, 1894. The parents, as well as the brothers and sisters of the child were healthy and she her-

self had never been seriously ill. A few years before, the parents noticed that when she had been playing a short time, or had been out for a walk, she began to limp. At first they thought it was a habit, even naughtiness, as they could discover nothing unusual about her legs. As the trouble increased they consulted a professor of medicine in Leipsic, who, after careful examination and measurement, declared there was a slight shortening and atrophy of the muscles of the left thigh. Various sharp embrocations to rub in were given, then the child was placed under homœopathic treatment, afterward the leg was treated with electricity and massage (though not scientifically); but this did no good, on the contrary, the shortening of the leg appeared more decided, so that when I undertook the case I found it as follows: The left leg was one inch shorter than the right, the muscles of the left thigh atrophic (wasted) so that the left leg measured sixteen inches and a quarter, while the right one measured seventeen inches and a half; otherwise the child looked well and healthy and as well developed for her age. I remembered in Wörishofen having seen similar cases treated in the children's hospital by the Kneipp Cure with excellent results, so I decided to try the Kneipp Cure in this case. I gave daily two applications, lavations, short half-baths, water treading and douches in correct alternation. The result was extremely gratifying. At first there was an internal improvement, the affected leg no longer became so easily tired, consequently the child did not limp so much, and soon there was a visible improvement, for on the 6th of July, when I measured the leg, I found the left thigh to be sixteen and a half inches, while the right was seventeen inches, and when I again measured on the 1st of August, the difference between the thighs had ceased to exist, for both measured seventeen inches. The difference in the length of the legs remained the same (one inch); it was not to be expected that in so short a time any alteration could take place, as bones cannot so quickly recover any delay in their growth as the muscles and softer parts of the body; but that even then the bones of the left leg showed an inclination to grow is evident, because later—I was able to keep the case under observation for some time—the growth of both legs continued at the same rate. There is now only the decrease in measurement of the right thigh to explain. Formerly, when the left leg was weak and powerless, the right leg was obliged to undertake part of the weight properly belonging to the left leg and to become the chief support for the upper part of the body; naturally the muscles here considerably exercised, but by the perpetual exertion they became strengthened and consequently increased in size. In proportion as the left leg became stronger the right was relieved, it had less work to do, and the increased size of the muscles diminished to its normal

condition. The improvement has continued, and no one who now sees the girl walking and jumping would observe a trace of the former trouble except that she wears a shoe with a slightly raised heel on the left foot.

MUSCLES, HYPERTROPHY OF THE (a rare disease). The muscular fibres in this complaint become closer and more thick-set, the upper arms and calves are particularly attacked by it. They feel very strong and retain their elasticity and enduring vigor for some time. (This phenomenon principally affects adults.)

In the other case, in which only children under twelve years of age are attacked, there occurs proliferation of the connective tissue, situated between the fibres, and a shrinking of the muscles. It mainly affects the calves and thighs, they feel flabby and show weakness when the child stands or walks. Treatment as with atrophy of the muscles.

MUSCLES, INFLAMMATION OF THE (Myositis) is generally accompanied with fever, and occurs, irrespective of rheumatism, in consequence of over-exerting a particular limb and catching cold subsequently.

TREATMENT.—Rest above everything, with fresh air and non-stimulating diet. Further, soothing compresses on the inflamed parts, as well as one or more full packs, of not too long duration, if fever is present.

In chronic cases, strengthening treatment, in other respects as with rheumatism.

TREATMENT WITH MASSAGE.—Stroking and kneading the affected parts very gently, combined with water treatment. See also under "KNEIPP CURE." For particulars on Massage, Kneipp Cure and Modes of Application, see Index.

MUSCLES, PARALYSIS OF THE can be contracted in consequence of over-exertion, excessive use of medicine (especially mercury), cold. etc., or it may occur as an independent disease, without being influenced by the above causes.

TREATMENT.—Repeated tepid wet rubbing (73°) of the affected parts and applications of stimulating compresses; steam-bath in bed, succeeded by wet rubbing of the whole body, vigorously rubbing the paralyzed muscles. The latter should also be massaged.

Besides this, a daily tepid wet rubbing of the whole body (73° to 77°), or bath; fresh air and sleeping with the window open. Where the disease affects the muscles in general, strengthening treatment to be adopted. See also under "RHEUMATISM, TREATMENT FOR."

Curative gymnastics highly to be recommended for this complaint, must be applied on professional advice only and with strict reference

to the individual case, because paralysis of the muscles may greatly vary in its nature. For this reason hard and fast rules cannot be laid down here. Curative gymnastics, consisting largely of passive instead of active movements—since the patient himself is unable to move sufficiently—massage in the form of stroking, kneading, tapping, etc., more or less forcibly is of great assistance in these cases. See also Groups VIII to XII.

Faradic electric bath and local application of the Faradic current may be recommended. For Massage and Curative Gymnastics, see Index

Muscular Rheumatism, see "RHEUMATISM."

MUSCULAR WEAKNESS. This may arise either from over-exertion of the muscles or from their prolonged inactivity. The causes of the disease, however, lie sometimes outside the sphere of the muscles, *e. g.*, in the nerves and their centres (brain and spinal cord), in the bones and their joints, in the blood, etc.

TREATMENT.—If the weakness arises from over-exertion, rest is of the first importance. In that case a daily soothing full pack (duration one hour), followed by wet rubbing of the whole body (adopted also for cases of muscular weakness, arising from other causes). If, on the contrary, it was occasioned by lack of exercise, moderate but regular exercise of the various muscles to be taken in hand, for example, curative gymnastics, group IV, to be gradually prolonged and extended, and a daily steam-bath in bed No. 1, duration from an hour to an hour and a half, as well as a lukewarm bath (88°) or tepid wet rubbing of the whole body (73°).

Besides the foregoing, give tepid sponge-bath (77° to 81°) once or twice a day, or wet rubbing of the whole body, which may be gradually taken a little cooler. In case of inflammation, use first soothing, afterward stimulating compresses on the affected parts.

As far as possible a non-stimulating diet should be adopted with plenty of fresh air, sleeping with the window open at night. In severe cases recourse should be had to a strengthening treatment.

Long continued muscular weakness may easily result in single or greater portions of the body and even the whole trunk becoming deformed. For particulars of Curative Gymnastics and for Modes of Applications, see Index.

MUSHROOMS. On various occasions in the course of time has reference been made to the importance of edible mushrooms and fungi as articles of nourishment, nor can that be done too often, seeing that in many parts of every country large quantities of this valuable food remain unutilized.

The highly nutritive value of mushrooms is in general as yet far too little known. We are aware that ᐧ mᵒ ᶠı gi, *e. g.*, the ***agaeicus oreadus***, or the truffle, are great delica‹ it is not so generally known that the morell ***(helvella esculenta)***, the ***cantharellus cibarius Fries.***, the turban-top, etc., approach meat (albumen) in regard to their nutritive value. This depends especially on the amount of the nitrogenous matter which they contain, and even the poorest mushrooms in this respect come very near the most nitrogenous foodstuffs of the vegetable kingdom, *e. g.*, peas and beans, and excel others, such as wheat.

But they contain at the same time almost the same salts as meat, which, *e. g.*, veal, they greatly resemble in taste.

Mushroom-broth is known to taste like meat-broth.

When gather· ıushrooms, they should be cut and not torn off at the root, so that aı rward fresh mushrooms may grow from the spores in the ground.

Psalliota Campestris
(undeveloped and fully-grown plant).



Fig. 236.

The best edible mushrooms are those whose tops ***(thalli)*** are as yet closed or have not quite opened.

Edible fungi form an excellent food and everybody should endeavor to draw attention to this fact.

I add some illustrations of those that are not easily mistaken for the poisonous ones, together with a description of their characteristics. On the whole it is necessary to be cautious. Those mushrooms only must be eaten, which we know for certain to be edible.

The natural size of the fungi illustrated in this book is about double the size given here. This refers to the full-grown plant; partly developed ones are not only smaller, but have sometimes different forms and colors, which change gradually.

Poisonous fungi.



Boletus Satanas Lenz



Russula emetica Schaeff



Fly Amanita *Amanita muscaria L*



Boletus lupinus

Edible fungi.



Milk agaric



Waved Hydnora *Hydnum repandum L*

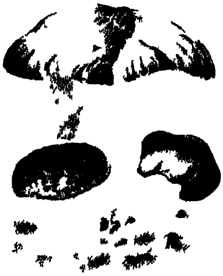


Fie[illegible] room



Oran[illegible]

Edible fungi or Mushrooms.



Edible boletus *Boletus bulbosus Schaeff (Bol. edulis Bull.)*



Rough boletus *Boletus scaber Bull*



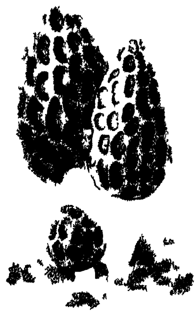
Boletus bovinus L



Hedgehog hydnum



Yellow Merulius *Cantharellus cibarius Fr*



Cone Morel *Morchella conica Pers*



Edible Morel. *Helvélla esculénta Pers.*



German Truffle *Tuber aestivum Vitt*

First and foremost must be named the field agaric *(agaricus oreadus)*, found both in summer and autumn at the outskirts of woods, in meadows, fields and open pastures, especially where horses graze, being well known for its pleasant taste and aroma and appetizing appearance. It is a great favorite in consequence. Its top *(thallus)* is from one and a half to four inches broad, round and white at first and afterward broad, pink or brownish; also the gills (the lining under the top) display in their development the same change of color, and the outside is always dry, the inside white, sometimes tinged with red.

The meadow agaric is ash-gray turning to brown, the agaric that grows in ploughed fields is quite white; it has a hollow stem with split ring. In the white or chalk agaric the gills usually remain for a long time white and only turn flesh-colored much later.

All these agarics are excellent food and of delicious taste, but when young and undeveloped they are all very much like the poisonous toad-stool *(agaricus caesarius)*.

This fungus (Fig. 237) has a greenish top and is covered with small patches of skin, the gills are white, the stem at the bottom rather thick and bulbous, and there is no agreeable aroma attached to it as to the common edible agarics, neither when young nor full grown.

Large Toad-stool.

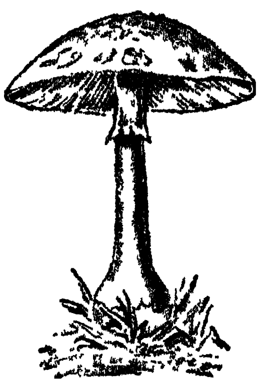


Fig. 237.

The Turban-top
(Boletus edulis).



Fig. 238.

The turban-top has a tawny or light-brown, arched cushion-shaped top, and white firm inside of sweetish, nutlike smell and taste; first white, later yellowish, when old, greenish-yellow gills. The top is two and a half to six inches broad, the stem is low, round, bulbous at the bottom, is very fleshy, pale-brown below and with white raised fine net of veins above, but

not hollow. This mushroom, growing to the height of a foot, grows till well into November, principally in pine woods, is rather solid, and as savory and aromatic as it is nourishing.

Morchel.



Fig. 239.

This is also a well-known mushroom. It has either an egg or cone-shaped, high top, covered on the outside with many irregular indentations and of a yellow dark-brown color; its stem is hollow, with many flat furrows of a white to a dirty pink and the thickness of a finger. It is found in spring in leafy forests, orchards and meadows, on a heavy clay soil; it is very tender, aromatic and juicy, the taste excellent and it is, therefore, deemed a delicacy.

Morchella Esculenta.



Fig. 240.

This fungus has a grooved, wrinkled, plaited top, of a yellow-brown to dark-brown color with overlapping fringe, hollow and white inside; its stem is white or pale-red, is thick, grould and uneven, inside irregularly hollow. It grows in spring (rarely in autumn) in meadows, by the sides of paths and in sandy pine forests. In other respects it is remarkably like the morell in form and color. (Taste good.)

Morchella Semilibera.



Fig. 241.

This mushroom is smaller than the previous one, is white or grayish yellow-white all over; its flesh is cartilaginous, it has a hollow, irregular top, streaked with deep longitudinal furrows. It grows in autumn in forests and in clusters. (Taste good.)

Orange Agaric (Agaricus Deliciosus).



Fig. 242.

This mushroom has a pale, orange-colored top, which later sinks down in the centre and frequently displays dark orange-colored rings. The stem is short and of the same color and becomes hollow as it gets old. The flesh is tough, somewhat bitter and pungent. It is distinguished from all other mushrooms by its reddish-yellow juice.

It grows in pine forests, summer and autumn, but also between juniper bushes and makes very strong broth. (Taste good.)

The Spring Fungus.



Fig. 243.

This is the first to appear in every forest, is of medium size, and easily known by its golden-yellow color. Its top is one and a half to five inches broad, arched, at first almost hemispherical: when young it is pale in color as also are the gills, afterward yellow, in the end deep-yellow. The stem, growing gradually thicker, as it nears the top, merges in it almost imperceptibly. It rarely grows alone but in clusters and flourishes in summer and autumn. In some parts of Germany it is almost exclusively the nourishment of poor people. (Taste good.)

Hydnum Repandum.



Fig. 244.

This fungus is of medium size, has a pale or reddish-yellow top, underneath it has dense, pin-like prickles or pale stubbles. Its stem, sometimes crooked, sometimes straight, is white or yellowish-white, varies in thickness and height, is mostly bulbous at the bottom. Flesh rather bitter and pungent, of yellowish white color. It grows in the woods during summer and autumn. (Taste indifferent.)

Yellow Goat's Beard.

(Clavaria flava.)



Fig. 245.

The yellow goat's beard has a yellowish-white stem, one to three inches in thickness; branches shoot from it four to five inches in height, of a yellow hue, its yellow points dashed with red. It grows generally in sandy woods in summer and autumn.

This fungus does not look unlike the cauliflower. (Taste indifferent.)

Red Goat's Beard.



Fig. 246.

This is a large-sized fungus; its yellow-red, very brittle branches, often tipped with red color, are in many ways intertwined with each other. The stem is white, thick and firm. Grows frequently in woods in summer and autumn. (Taste indifferent.)

The Puff-ball.

(Lycoperdon plumneum.)



Fig. 247.

This is a ball-shaped fungus with delicate veins on the top, the size of a hen's egg, white or gray, afterward earth-colored. It narrows at the bottom into a short stem, the flesh is white, later greenish-yellow and brown, when it is no longer edible; at last it turns to dust, which rises like smoke from an opening at the top. It grows freely in autumn in woods and on grass plots. (Taste indifferent.)

Agaricus Procerus.

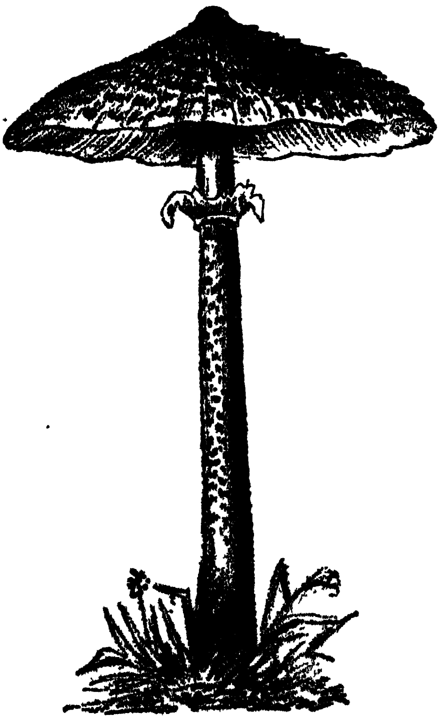


Fig. 248.

This large fungus grows to the height of seven and a half to ten inches and more. The top is light-brown, but with many tawny patches of skin on it; in its centre there is a dark-brown protuberance, the gills are white or bright-gray, the flesh is white, with pleasant smell, the stem light-brown with tawny scales, thick at the bottom, is hollow and is furnished with a large movable ring. It grows in summer and autumn at the outskirts of forests, in young plantations and upon open spaces in woods. (Taste good.)

Agaricus Bitulinus.

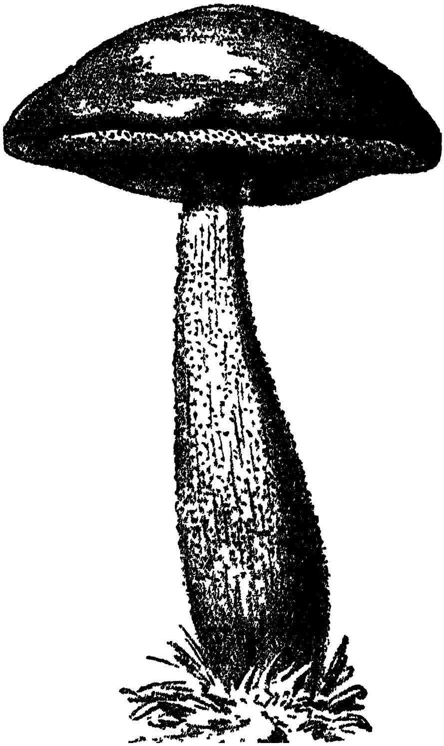


Fig. 249.

This mushroom grows often to the height of a foot and more, has a gray-orange colored, red or brownish-red, comparatively small top; white, afterward whitish-gray gills, white flesh, often turning gray, bluish or black, when cut up; its stem is long, white and wrinkled with dark fibres or protuberances. It vegetates in summer and autumn in woods and bushes. (Taste good.)

The Ringed Fungus.



Fig. 250.

This is of medium size, with a brown or brownish-yellow, dirty-looking, thick top, pale-yellow, fine gills and soft, tender white or yellowish flesh, with a pleasant smell as that of sour fruit; its stem is the size of a finger, and has a white, afterward brownish ring, above which the stem is pale-yellow with brownish spots. It is found in great quantities in summer and autumn in pine woods and at the sides of forest paths.

Boletus Luridus.

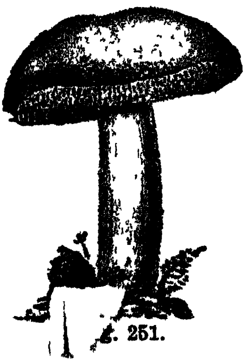


Fig. 251.

This is a fungus of medium size, with delicate felt-like top, soft to the touch; the color is a grayish-brown, or a mixture of yellow, green and brown; yellowish or greenish-yellow gills with pale-yellowish flesh, with sometimes a dash of blue in it and fruit-like aroma. Stem somewhat yellow, mostly shading into red and frequently with rather coarse dots on it. Grows in woods and hedges very freely during summer and autumn. (Taste indifferent.)

The yellow fungus has a very brittle, smooth, yellow top, formed of thick laps and often attaining the breadth of seven and a half inches

The Yellow Fungus.

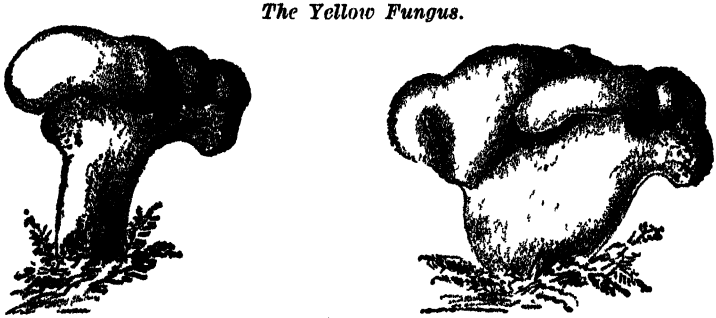


Fig. 252

and over; fine white gills, white firm flesh, of powerful smell and sometimes rather bitter taste and a thick, short, white stem, spreading out into the top. It grows principally in sandy pine forests during autumn.

The Cat's Eye, or Bovista.



No. 253.

This fungus is likewise of round shape, the size of a pigeon's to a hen's egg, but without stem, is at first white, later of a brown color and smooth. Its flesh is white, afterward yellowish and, like puff-ball, turns to dust. It grows during summer and autumn in meadows, pastures and by the way-side. (Taste indifferent.)

The *bovista gigantea,* too (larger often than the size of a head), as well as the prickly bovista, are both edible, as long as their flesh remains white.

Truffles are bulbous mushrooms, with their inner side veined, and which grow under the earth in leafy forests.

Which mushrooms are poisonous and deleterious? With few exceptions all those, which have a pale-yellow or bright color and which turn bluish where they are broken up and which have an unpleasant smell and sharp, pungent taste. Those must be looked upon with suspicion which have a bulbous stem at the bottom, which rise from a so-called egg, have a hollow stem, are soft and watery or dissolve into a blackish liquid, though even among them there are found many edible sorts. The *agaricus bitulinus,* the *boletus buridus* and others turn sometimes gray or bluish, when cut, but are edible nevertheless.

The Little Toad-stool (Amanita Muscaria).



Fig. 254.

I give a drawing of the particularly notorious poisonous bright-red little toadstool, furnished with white spots all over it. The drawing is about one-half of the natural size (we gave a drawing of the poisonous large toadstool).

Most of the poisonous mushrooms, however, give out their poison on being boiled in water. With doubtful sorts, therefore, the water ought always to be thrown away after boiling.

An extract follows here from the "Vegetarian Review."

The preparation of mushrooms is exceedingly simple and requires but little trouble and expense. After cleansing them from the soil adhering to them, cutting away any bad parts and peeling off all hard skin, they are washed in cold water, but must not be squeezed.

Salt, fat (butter), flour, pepper, onions and parsley are added, and they are boiled like ordinary vegetables. A tasty dish is prepared in this way, which is eaten with potatoes or bread, etc. It is not advisable to warm them up a second time, as by doing so they lose a great deal of their flavor.

Another way is to stew them; the field agaric, the cantharellus cibarius Fries, the turban-top and the morell are most suitable for this purpose. They are cut up in pieces and fried in butter, oil or other fat—of which as much may be taken as is deemed proper—for about half an hour. Many connoisseurs prefer the second way.

A good broth also may be made of mushrooms by boiling a quantity of them,—the agaricus deliciosus is the best for this purpose—with water, salt and butter.

Even in the raw state, without any preparation, they can be relished, as appears from the extract of a letter of Mr. *Schwaegrichen*, Professor of Botany in Leipsic, communicated by *C. C. Person* in his treatise on edible mushrooms.

"During a journey," says the Professor, "which I made through a part of Germany and Austria, I noticed in the neighborhood of Nuremberg, where I spent part of the summer, that the peasants used to eat their blackbread, which was spiced with anise seed and caraway seed, with raw mushrooms. Being engaged at the time in the examination and the study of cryptogamous plants, I resolved to try the effect of this nourishment upon myself. I, therefore, imitated these good people, and, within a few weeks, found myself eating nothing but bread with raw mushrooms and drinking water. Far from noticing any injurious effect upon my

health, I felt increased strength for my wanderings. I preferred those kinds of mushrooms that had no disagreeable taste or smell and were more firm and solid."

To be able to have mushrooms also in winter, they must be dried, unless they are pickled. The small mushrooms, after being properly pickled and cleaned, are spread on a table in the shade or strung and hung up carefully in a dry place, if possible, near the stove. Large varieties must be cut up. As soon as they are fairly dry they are placed in nets and hung up in a dry place, as near the stove as possible. When they are wanted, they are soaked in warm water. For further preparation of mushrooms, see under "MIXED DIET."

It has hitherto been usual to look upon the value of a certain foodstuff according to the amount of albumen which it contains, and to depreciate the rich hydrates of carbon in the majority of our plants. Everybody ought logically to have put the aliment drawn from mushrooms in the foreground. But that has advisedly not been done since the human body not only requires the two substances, but in a yet higher degree carbo-hydrates, and such a strong and one-sided source of nourishment as the mushrooms of the forest always requires to be properly supplemented by a correspondingly large amount of starchy food, such as potatoes and grain, if the excessive good is not to have a bad result.

But what renders mushrooms so valuable is their enormous percentage of mineral salts—more especially phosphates and potash salts.

According to Dr. *Oidtmann,* it is above all phosphoric acid, which is indispensable for building up the substance of the bone, the muscles, nerves, the spine and the brain.

In the following table of the amount of phosphoric acid contained in various mushrooms, water has not been included, as the fungi absorb different quantities of water, according to rainy days. We find accordingly of phosphoric acid:

in psalliota campestris.............	18.43	per	cent.
in boletus edulis..................	20.12	"	"
in tuber cibarium (the black truffle)..	30.85	"	"
in cantharellus cibarius............	31.32	"	"
in clavaria flava...................	35.07	"	"

The results of another investigation show that morchella esculenta holds 46 per cent. of phosphates, besides 35.18 per cent. of protein, and helvella esculenta as much as even 49 per cent. of phosphates, besides 26 per cent. of albumen.

The potash salts, too, play an important part in the economy of the human body.

They are also contained in the mushrooms to an extraordinary extent, as the following figures show:

Of potash salts we find in the ashes of

boletus edulis	50.95	per cent.
psalliota campestris	50.71	" "
clavarica flava	51.47	" "
tuber cibarium	55.97	" "
cantharellus cibarius	48.75	" "

Besides the question whether or not the consumption of too great an amount of phosphoric acid is dangerous, if not supplemented by a sufficient amount of potash salt and protein, there is the ominous increase of deleterious qualities, produced at the initial process of disintegration of old mushrooms. That has undoubtedly been observed on many sides.

That there are also mushrooms that contain too much of the good thing, phosphoric acid, does not alter the case. We must not drink the broth of ***amanita Russulae*, *boletus satanas*** and ***scleroderma vulgare*,** even when boiled in earthenware vessels.

Amanita muscaria is unprofitable, because it has to be scalded with boiling milk first, in order to remove the excess of the good (or bad) it contains.

It is strange that of all the topless mushrooms existing, we consume only the one which may cause injury, if treated carelessly. All the other topless mushrooms, that may be reckoned among the edible ones because of their fleshiness, are so little doubtful, that we may, without compunction, drink their broth: still we do not do so. But they are no longer fit for consumption when their flesh first turns yellowish, then greenish, and finally olive-brown.

There are, in the same way, no injurious varieties among the cup and branch mushrooms (among which we should specially look out for the savory hare's ear, ***clavaria flava*, *botrytis*** and the truncated mushrooms), nor are there any among the morells and morellas. There are most splendid varieties that grow on trees, like ***fistulina hepatica*,** a great favorite in England.

Not one single injurious species at all grows on trees, but certainly some tough, leathery, bitter varieties, like the ***clavaria L.***

We divide mushrooms, therefore, into three classes: Firstly—Those whose broth gives us the entire amount of their nutritive value, together with the full flavor which they possess; secondly—those which yield a somewhat unpleasant taste or too much nutritive value, with an insufficient mixture of other nutritive ingredients, so as to oblige us to pour away the first water, or to use the plants only in a dried state; thirdly—

those which we either eschew entirely (there are only a dozen of them) or can use as food if we do not mind the trouble of carefully preparing them.

These plants of the forest multiply in such a vast degree, that there are more than plenty for man and beast. The want of knowledge is to blame for the fault, that in regions like the North of Germany, hardly more than five species of mushrooms are eaten, and that the poor who want to make a little profit out of collecting them, have to roam the woods for days, just to find these varieties, whilst thousands of tons of the very finest kinds are, because of their ignorance, unheeded by them, or trodden down by children gathering brushwood. If we, moreover, bear in mind that every rainy day not only produces thousands of tons of these plants, but renders them again no longer eatable, we can understand what the constructive damage amounts to, which mankind suffers through not paying attention to this important source of nourishment. We consider it therefore the duty of every man, to make himself acquainted with the more frequent varieties of edible mushrooms. For better instruction on the subject of edible fungi, I recommend the books and writings of Dr. *Roell*, Professor *Lenz*, Dr. *Hahn*, Miss *Freitag*.

I will mention here that the artificial cultivation of the *psalliota campestris*, in which a great many people are engaged nowadays, is a very profitable business. The mushrooms thus gained have, at the same time, a finer flavor than those gathered in wood and field. More details on this point will also be found in the above-mentioned writings.

Addenda.—Mushrooms get hard and leathery by long boiling or frying, as everybody will have convinced himself who has had occasion to eat them, and for that reason become more and more indigestible. It is best, therefore, to eat them raw, or as salad. In the latter form, they are cut in thin slices and mixed with oil and vinegar, or the fresh mushrooms are crushed in a mortar into an uniform mass, mingled well with flour, and simply boiled up in hot water, or dripping is stirred into the pulp, heated and diluted with boiling water. In this way is made the best and most nourishing mushroom broth, or, when thicker, the best mushroom vegetable. Dried mushrooms are treated in the same way. Only by this treatment of them can their enormous nutritive amount be utilized to the full, for small pieces of hard-fried or boiled mushrooms are generally not so thoroughly masticated as to become entirely and fully dissolved in the stomach to make it fit for nourishment.

Mushrooms, boiled in metal vessels and stirred with metal spoons, lose much of their flavor, and become unwholesome in consequence, especially when they have been allowed to get cold in them and are kept in them for further use. This must be borne in mind, with reference to

their treatment as given above, as well as in preparing dishes of mushrooms, as enumerated in "DIET, MIXED."

Mushroom Dishes, see "DIET."

Mushroom Poisoning, see "POISONING."

Mustard Sauce, see "DIET."

Mutton, How to Boil, see "DIET."

Mutton, Leg of, How to Prepare Like Venison, see "DIET."

Mutton, Roast, see "DIET."

Myositis, see "MUSCLES, INFLAMMATION OF."

N.

NAILS, INGROWING. This usually affects the great toe, and the nail grows into the flesh when it has been cut too short and the skin has been pressed over the edge of it by a shoe that was too tight. In consequence of the irritation of the quick by the edge of the nail pressing into it, a painful inflammation with a gathering results. It is necessary to treat this so-called in-growing as soon as possible, or the nail may have to be entirely removed. The best method of guarding against it (especially on a walking tour) is to scrape the nail in the middle lengthwise, quite thin, with a piece of glass, and so cut the free edge of the nail, that the corners project beyond the middle; then, when the foot is placed on the ground, the nail will lie quite flat and cannot grow into the flesh. If it has already grown in, raise the edge of the nail and place a thin pad of medicated cotton-wool under it. (If the nail has grown in deep, a thin strip of lead should be introduced under the edge, the lead bent over the side of the toe and fixed with sticking-plaster.—Dr. *Bock.*) If the skin is inclined to fester, frequent foot-baths must be used, and stimulating or soothing bandages laid on it.

Wherever the nail is cut, it will grow; if cut at the edges, it will grow into the flesh there, but if it is only cut at the top, it will grow there and not into the flesh.

NAP, AFTER DINNER. Notwithstanding the prejudice of people at the present day, who think that we should not rest after a hearty meal, I advise everyone, who can do so, to lie down after a meal for from a quarter to half an hour, because with all the extremities at rest, the full circulation of the blood is at the disposal of the stomach which, therefore, is enabled to digest better, or, as the case may be, to prepare the chyle. It suits many people better to take their nap sitting in an easy-chair rather than lying down.

This is especially the case with nervous people, as well as those who are inclined to corpulency, or suffer from fatty degeneration of the heart. If such people lie down, the distended stomach is liable to press against the heart, producing palpitations, a feeling of anxiety, etc.

A nap refreshes the body and renders it more fit for renewed action.

But it should not last more than from a quarter to half an hour, as after a longer nap, instead of feeling refreshed, one only feels tired, lazy, and disinclined for work.

Idlers, of course, do not need a nap for this purpose. Rest after a meal is to be recommended as being natural. It is better to adopt the aphorism:

After meals for us to rest,
And to take a nap is best;

than the obsolete one:

After meals we should not rest,
Since to take a walk is best.

Patients who feel languid, can also rest for some time before dinner.

NAP, AFTER DINNER, FOR CHILDREN. I am sorry to say, it is a general custom when children are expected to sleep, in the morning or afternoon, to put them to bed without undressing them. The nurse is too lazy to undress and dress the child, and the mother does not know, how wrongly she is treating her darling by putting it to sleep with its clothes on. The little one, put to bed in its clothes, awakes weakened by perspiration. Instead of being refreshed and strengthened, it is cross and sulky, because it has not had its sleep out. If the strings and buttons have not even been loosened, there has been, during sleep, a pressure on the chest and abdomen which has impeded their free expansion, and rendered respiration and digestion difficult. How different is the wakening of a child which, dressed in its little shirt or night-gown, has been lying in its bed, covered up moderately warm and with the window of the room open. How calm and serene was its sleep, how regularly it breathed, with what a bright smile it meets us, and how comfortably it

stretches its little limbs. Washed and dressed again, it is lively and cheerful till the evening. Besides, children catch cold at night much more easily when they have slept in their clothes at daytime than those who are undressed every time they are put to bed.

Narcotics, see Index.

Natural and Unnatural Form of the Female Body. See "WOMEN, DISEASES OF."

Natural Healers and Sanatoriums, List of. See Index.

NATURAL METHOD OF HEALING, THE. One of the most momentous advances which the nineteenth century has seen, is, indisputably, the re-invention and development of the Natural Method of Healing which has attained a magnificent perfection. Its invention and progress do not benefit a single individual—*e. g.*, the owner of a patent, etc.—as is usually the case nowadays, but affect all humanity, whose paramount earthly possessions, life and health, are here concerned.

The adherents of the Natural Method of Healing are slightingly looked down upon, at this day, by only a small fraction of those representing and aping the old pedantic caste of doctors who scoff at, and ridicule them and their method. Our method has lately won such a great number of adherents, even among allopathic practitioners, that the time is now not far distant when it will mount the pinnacle of therapy, for our system is the only natural and rational one, and has already wrought results far greater than those achieved by any other system.

In those localities where the natural method has taken root, its practitioners have already found a greater sphere of usefulness than medical men. The former are indeed overwhelmed by applications for help. Where before but one natural healer was required, two or three are now necessary.

The public, too, in these places are in full sympathy with us, and we and our method are no longer held in disrepute by our opponents. On the contrary, the reverse is gradually taking place.

I would here most seriously and urgently entreat doctors to acquaint themselves more and more with our method, so that the time may come when only the natural and kindred methods of treatment will find general application to the health and welfare of suffering humanity.

I would also remind medical men, that they do not stand alone in adopting our therapy and bidding farewell to medicine. No, many and eminent authorities in the ranks of their profession have done this long ago, as may be gathered from the chapter "MEDICINE, OPINIONS OF MED-

ICAL MEN ON TAKING," and in various parts of my work, as well as from other works of a cognate character.

I would request them earnestly and *repeatedly, to gain an insight into* our method; the people ask for it, and if the doctor does not soon apply it, the unprivileged helper will do so.

It surely speaks in favor of the Natural Method of Healing that not one convinced adherent, whether doctor or otherwise, has ever after swerved from his newly acquired faith (we, at least, know of no such one, though we are able to carefully follow the progressive movement). But this is a matter of daily occurrence in other systems.

Those who have again turned their backs upon our method, were not genuine followers. They never penetrated to the kernel of the nut, because they probably tried the treatment but once, perchance imperfectly, or only for a short period during a long, tedious disease, etc.

In the cure of diseases a vast deal depends on the time, at which a treatment is adopted; whether in the first, second, or third stage of the disease. It has, of course, a much greater and more rapid effect at the beginning than later.

And because the Natural Method of Healing has not yet gained the requisite confidence with the majority, recourse to it is generally had only when all other means have been exhausted and the malady has already assumed a malignant aspect. Even then the treatment is often followed only for a short time, and if no very striking improvement is evinced within this short period, people generally say: "Oh, that's no good either," and they discard it, although they held out patiently enough for months with other methods of treatment.

The following deserves mention: If a patient, for example, is treated by a natural healer and recovers quickly, then the illness is considered a mere trifle, but let a medical man attend a patient for from four to six weeks (and longer), before he recovers, the illness is something to speak of. The greatest respect is paid to the medical man, and even if the patient should die, it is put to the account of divine providence, and the doctor reaps the family's gratitude for the trouble he took, and receives public recognition in the newspaper for his care and devotion.

How rich the nineteenth century still is in errors and prejudices, and how poor in genuine thought and knowledge!*)

I must also once more emphasize, that chronic complaints—for only these can be the subject of discussion here—though materially alleviated by our method within a short time, have often required years for their

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*) This dictum is not only true of therapy, but also of other subjects dwelt on in my work "How to Improve the Times."

development, and consequently cannot be spirited away and removed at a moment's notice.

In acute diseases, the success of our method and its superiority over others quickly manifests itself.

To enable a man to apply our treatment, the following conditions are required: 1. The frequent reading of books on this subject; 2. Hearing lectures concerning it; 3. Learning its results by practical application; 4. Personal experience of the miscarriage of medical treatment, etc. It cannot all be learnt at once, nor are a couple of lectures on the subject sufficient, but the case is the same here as when learning a trade or profession. Practice makes perfect, and continued study and experience alone will produce stout adherents.

We followers of the Natural Method of Healing have chosen nature, with the power she possesses, for our security. What security does the medical man give? The answer is: "Poison, with its destructive force." Which therapy is the more trustworthy of the two?

The proverb "The learned man cannot see the wood for the trees," applies admirably to many medical men. They cannot see nature's healing power, by reason of their science and learning.

We who have adopted the system of treating disease by natural means, guarantee to prove that ours is far superior to all others, whether medical, "magical" or what not, in regard to speedier and radical cure. If any one accept the challenge, let him come forward!

A patient who applies our treatment for the first time, may always begin with water at a temperature several degrees warmer than that prescribed; after a time, his body will become accustomed to a cooler temperature, and water of about 77° will then seem hardly so cold to him as water of 81° or 85° seemed at first.

It must not be imagined that our treatment is so very simple; we have almost as many medicines, or rather modes of application, as the medical man has prescriptions. Not simple is it, therefore, but intelligible, because everything is expressed in the vernacular, and not in Latin (like the prescriptions of the faculty). The applications themselves, too, notwithstanding their great diversity, can be easily put into practice by anyone.

A doctor, when at his wit's end, frequently says: "Give the patient a compress." This does not mean anything, for he generally mentions nothing further as to the way in which, and the purpose for which, it is to be applied. That is not enough; an able natural healer must have at least from four to five hundred modes of application (or more) at his fingers' ends, and know their effect upon the patient (exclusive of treat-

ment by massage, magnetism, and curative gymnastics, all of which are indisputably part of the Natural Method of Healing).

Every form of application produces a different effect, which again varies in each individual case.

As every application acts differently on different patients, the natural healer must be capable of adapting his treatment to each individual case, *i. e.*, he must consider well, in what stage he finds the disease; what is the stored strength of the patient's vitality; what the course of the malady, etc.; in a word, the nature of the disease and the amount of vital force necessary to overcome it.

In one case, for example, a patient with strength and who has a good constitution still; in a second, a more or less strong, or a very feeble patient; in a third case, a highly irritable and sensitive, or an apathetic and enervated patient; here a patient brooding over his thoughts, there an irascible and bilious man.

The various functions of the patient's system have also, in each case, to be considered; here a rapid process of assimilation, there a retarded change of matter; here action, there all repose; here the blood coursing wildly through the veins, there the pulse beating feebly and slowly; here plentiful access of fresh material for assimilation, little being spent, there the very reverse; here a broad river of health, so wide that there is very little fear of transgressing its limits, there a narrow stream, within which health is confined, trickles along and is very easily overstepped by organic function, without much chance of retracing its steps, etc.

Medicine has no beneficial effect whatever. The reaction in the system, after having received medicine, arises from the endeavor which it makes to again get rid of the poisonous or deleterious matter, by vomiting, stool, perspiration, passing urine, etc. It is this that leads the allopathist astray. He fancies, it is those inert substances that take effect.

In the same way that a gardener, noticing a tree or bush with some of its leaves fading and its branches withering (morbid), gives the tree or bush better soil, more or less moisture, warmth, air, sun, etc., so ought the sick man to be treated; *i. e.*, no patching-up of the separate diseased organs should be undertaken.

The human race is, at the present time, floundering in a morass of errors so deep that it mistakes for false what alone is true and natural, and for true, that which is false. Thus, *e. g.*, a pamphlet puffing some quack remedy, finds a ready sale, whereas it is comparatively difficult to dispose of one setting forth the true principles of pathology of the Natural Method of Healing.

But that is not the case in this one instance only, but also in other matters. People, alas, do not like to hear the plain truth; they generally turn a deaf ear to it. God grant that a change may soon take place!

Reader, not medical therapy, but the Natural Method of Healing alone, is the sure way in every disease. Of that I am quite certain. Would, that all sufferers would take these, my honest words to heart!

For information on, and instigation to explore, the subject of the natural treatment, both old and new adherents require to hear lectures and dissertations on it now and then. Many know, it is true, what to do and what to leave alone; how to keep in good health; or even how to get well; but they are frequently deficient in the knowledge, how to carry out the method strictly, or how to commence. Many of our followers would do well to reflect upon the truth of the proverb "An ounce of practice and common sense is worth more than a ton of knowledge."

That special lectures, particularly for people not convinced, are necessary, goes without saying, because they help to convert many to our views. Therefore, if space permits, everybody should be invited and admitted free of charge to a lecture of this kind, in order to further the good cause. If a price for admission be charged, that will undoubtedly exclude many who might eventually have been converted. As it is, such lectures are nowadays not even considered worth the money. That a lecture of this description does not at once cause many persons to be enrolled in the ranks as members is very certain. To expect that, would be to show little knowledge of the world in this respect. We know quite well that nearly all those who are not of the same opinion on this subject as we are, live in the conviction that there is nothing like medicine in sickness, and to convince them of the absolute error of that view, a single lecture on the Natural Method of Healing is not sufficient. A man's convictions cannot be changed in an instant. More time than that is required. It is quite sufficient if people, after listening to such a lecture, go home and no longer smile at or deride it, or even consider it humbug, as perhaps was the case before. Such people frequently turn to our treatment (as has happened over and over again) as a last resource, when they have tried nearly all other remedies, remembering some former lecture or recommendation, and when such patients find help from the system, they generally become its stoutest adherents. When a man has never heard of any sterling success achieved by the natural method; he cannot be expected to apply it, except as a last resource. Therefore, it is our first duty to take care that every man should—by lectures, etc.,—be informed as fully as possible of the successes, with which our treatment is crowned, so that he may receive a more favorable impression of it.

It is clear, at the same time, that, besides those people who are only with difficulty converted to our doctrine, there are many—and those, for the most part, educated and sensible persons—who, after hearing a couple of lectures, are ready to try our treatment, just because it appears to them far more rational than the medical regimen.

The Natural Method of Healing. (THE USUAL OBJECTIONS ANSWERED.)

Extract from Dr. TRALL's book: "The Rational Therapy."

1. "The treatment with water (natural method) is too slow for dangerous and violent diseases."

Answer: It cures every known disease more rapidly than anything else.

2. "It is too rough for delicate persons."

A. It is the mildest treatment ever invented.

3. "It is troublesome and requires much labor."

A. Health is worth working for. It is very convenient to take medicine, and very easy to die. A few drops of prussic acid are enough to kill a patient in five minutes, but long years of labor are required to restore him to health. Which of the two would the wise man choose?

4. "Pale, weakly persons suffering from anæmia, cannot bear cold water."

A. Nor are they to use any. They require warm and lukewarm applications.

5. "In cutaneous diseases, cold water is apt to send the morbid humors back upon the internal organs."

A. Such is not the case. Humors of every description tend, according to nature, toward the surface, and cold applications only increase this tendency when there is abnormal heat. When they are driven back from the surface, it is always the consequence of blood-letting or of poisonous medicine.

6. "Many people have tried the wet pack, etc., with manifest disadvantage; no reaction took place."

A. Very true, but wrong treatment was the cause. Either the patients ought not to have had applications of this kind made to them, or the person who advised them to try them, did not know what he was about.

7. "The diet—mostly vegetarian— is too poor and meagre, to suit all constitutions."

A. It is the most nourishing diet in existence.

8. "Tea and coffee, etc., are excluded, though to many they have become a necessity."

A. These beverages are not more necessary to them than alcohol and tobacco to others. We eschew all stimulants, because they do not give, but destroy, strength.

9. "Persons who have lived on this simple diet till they recovered their health, are obliged to continue it, lest they should become ill again."

A. That is also quite correct. A reformed drunkard can only remain sober so long as he does not again meddle with intoxicating drinks. Our method certainly aims at obviating retribution and offenses against the laws of nature. And it is founded on obedience to the latter.

10. "It deprives people of many good things, to which they were accustomed."

A. Custom, alone, is but a poor authority for the use of either good or bad things. Our method does not forbid anything that is intrinsically good, but it is opposed to all false habits and morbid needs; in short, to everything that in itself constitutes a cause for disease.

11. "The great majority of medical men do not approve of the treatment."

A. Because it gives rise to opposition. The general introduction of our method would prove the ruin of medical men.

12. "Some hydropathists give medicine, others reject it; who shall decide when doctors disagree?"

A. The fundamental principles must remain the same. Our method is hygienic, not medical. Whoever prescribes medicine, is no true hydropathist, whatever claim he may make to being so.

13. "Why should not doctors, who are in possession of all the knowledge accumulated in their profession for three thousand years, be able to judge the merits of this new method, as well as its representatives?"

A. Because they do not occupy themselves with it, etc.

THE DECEPTIONS PRACTISED WITH COUGH MIXTURES, PAIN EXPELLERS, PILLS, ETC.

When a man takes up a prospectus or pamphlet, I mean one of the kind containing thousands of testimonials from persons cured, and which is furnished to newspapers and "journals" in extra sheets, and reads of persons having been cured either by the use of some mixture or by other universal quackeries, he will say to himself (if he be possessed of average intelligence), that there must be some good in these remedies, and will,

perhaps, be induced to give them a trial, although he may have, in vain, tried many others of the same kind before.

It will be asked: If all these powders, pills, and universal salves do not possess any natural virtue whatever (as I have repeatedly declared), but, at the most, produce only stimulation of the diseased system, how does it happen that so many have been cured by their means, as is shown by thousands of testimonials? On the other hand, there are many who cannot at all understand, how a certain nostrum, which has done good to so many, should have failed in their own case, etc.

The answer to these queries is easy enough. Every man, as is known, has within himself a healing agent,—or, as a very celebrated medical man lately expressed it, carries his own family doctor within himself. Our nature, endowed with the precious boon of vital force, which is continually at work to cure diseases and to equalize disturbances, has restored to health many thousands who erroneously fancied, that they had been cured by the nostrums of quacks!

In confirmation of what I have said, let me adduce a simile which illustrates this error pretty correctly. If an agriculturist were to publish in newspapers and prospectuses that he had caused the fine crop in the green field or meadow to grow, and boast about it, people would simply say: "What a fool you are! Not you, but nature made it grow."

It is just the same in the cure of diseases. Nature cures, and the empirics claim the merit. That is not only ridiculous, but even sinful (the countryman indeed would be more in the right, for he at least assists nature by natural means, *e. g.*, ploughing, manuring, etc., while they [the quacks] apply only unnatural means, and thereby suppress the vital force).

It certainly furthers materially the growth and thriving of fruit if the ground is watered in the absence of rain, or if the field is ploughed and manured. And in exactly the same way may nature be favorably stimulated by natural means and expedients (such as are taught by the Natural Method of Healing), and may be supported and seconded in her efforts, without the slightest harm being thereby done, but never by means of irritating powders, pills, or other medicines.

If, for example, the sun and rain were excluded from a corn-field or meadow, growth would cease and the crop would perish. The same is the case with a patient. If the natural means of health and healing—such as air, light, water, changes of temperature—are denied to him, or if, instead of these healing agents, he is supplied continually with poisonous medicines,—in the shape of powders, pills, and the like,—the process of cure initiated by the vital force, which is called upon to turn the morbid mat-

ter out of the body, will be paralyzed, and the patient will sooner or later suffer, at least most seriously, if not to the extent of losing his life. While I am on this subject, I may also refer to the article "THE DANGER OF USING MEDICINE, BY REASON OF ITS POISONOUS NATURE," see Index. The effect produced by the application of medicine is shown in a more detailed manner there.

It will now be plain to the reader, why among the many thousands of patients—who, in consequence of true therapy being as yet so little understood, fall so frequently into the hands of empirics—there must of necessity be a few who recover by virtue of their innate vital force.

These few (of the many thousands) who have found some relief, often but a short-lived one, sometimes furnish a testimonial or recommendation. Notwithstanding the fact that their illness perhaps appears afterward in a worse form, they never publicly recall a testimonial once given, lest they should incur the ridicule of the public, as silly victims of a swindle. So they quietly put up with the loss of the money expended on the nostrum rather than to be looked upon as dupes and publicly exposed.

Let us suppose now, that five out of every hundred sufferers recover, while using the quack's specific, by virtue of their innate vital force,—an eventuality which, in view of the many thousands falling into his net, is sure to create a noise, since the many unsuccessful ones will never open their lips,—I will wager that, of the patients who swallow the stuff which the quack offers to the public, not five, but far more than fifty per cent. would recover their health, if regularly treated by the Natural Method of Healing.

That is about the truth with these greatly puffed and plausible nostrums. They benefit only the man who sells them, not the man who buys them. People may do as they like; I can only once more give the well-meant advice, never take or apply anything that is contrary to nature, because by doing so, people only injure and weaken their "resident family doctor" (their vital force).

Just ask the host of patients who have for years swallowed pills, powders, and other patent physic, how they feel after it all; the great majority of them have only become more ill and miserable in consequence. If you now see and know that these patent medicines—of which but one or two doses produce a wonderful effect, according to the assurances of these quacks—have been taken for years by many patients, and have made them feel no better, but only worse, will you not, in the end, doubt their efficacy? The superstition about the virtue of these medicines is surely not so deeply rooted within you that nothing could eradicate it. Eradicated it must be. If that result is impossible for you, it will not be so

for your children or grandchildren, and they will exclaim: "Oh, how far behind us in therapy were our parents and grandparents!"

More than three thousand years ago when the human race paid more attention to the laws of nature and lived up to them, people were not possessed with this superstition—this destructive superstition. It wormed itself slowly, together with many other stupid innovations, into the mind of man who then began to deviate more and more from the laws of nature, and to think that diseases could be cured with poisons and irritants.

My words and exhortations are honestly meant, and are true. They come from my heart; do not dismiss them without a thought, even if you should be inclined to think them hardly credible and savoring of quackery. I repeat once more,—the same vital force that causes the downtrodden blade of grass to rise up again, also preserves man and heals his complaints.

One thing more I wish to mention in connection with patent medicines. A man sometimes discovers an improvement in his condition after taking these pills, powders, or other medicines, notifying the fact, generally, by the expression, "That physic has done me good!" Alas, this effect is only delusive. The pains, it is true, diminish for a moment, after swallowing these poisons or irritants, or after applying an embrocation, but for that very reason the bodily condition becomes more serious, more critical. The reason is this,—either the painful sensibility is blunted and the nerves are weakened by narcotics, or the circulation of the blood which for the purpose of healing always flows more abundantly to any affected part and keeps up the pain there by its increased pressure—is drawn away into other channels by such mixtures, and therefore causes the pains to subside somewhat. People, therefore, think that the medicine has done them good. These patients, however, feeling their sufferings alleviated after taking the nostrum, are rather to be pitied (in the generality of cases) than envied. For, on the whole, these irritants do great injury to the system.

It is only soothing and pain-relieving remedies, such as the Natural Method of Healing makes use of, that have a really salutary effect, and these are at our disposal in highly critical cases, at the same time yielding far more satisfactory results than any other mode of treatment. It will indeed very rarely occur, that an able natural healer cannot soothe the patient's pain in a comparatively short time; especially if he includes magnetism and massage among his applications. At any rate, he can soothe them by soothing applications (see *ibid.*) far more quickly, and that in a very harmless manner, too, than the medical man can with medicines, powders, pills, ointments, etc.

It deserves also to be mentioned that medicines in which the patient has faith, or a change of treatment under a different doctor, etc., may exercise for some time a beneficial influence, in cases in which the patient has been reduced physically and mentally, by the inroads made upon the constitution by a long disease. The reason of this is, that he is animated by a certain hope when he begins a new system of cure, but hope plays an important part in therapy, because it often increases the patient's vital force and power of resisting the disease, and a really lamentable condition is often sensibly improved in consequence. A hopeful patient is cured sooner than a despondent one.

How frequently this favorable influence on the patient may have been ascribed to nostrums and medicines!

The following is an error, which I would rectify: The medicines, powders and pills which are taken, do not, for the most part, go to the root of the disease—as it is thought perhaps—to destroy the morbid matter there, but remain in the stomach for some time, like any other substance received by it; then they pass into the blood which either ejects them from the system, or deposits them in the mucous membranes, in some part of the body; they do not, therefore, come into direct contact with the diseased organ. I say once more, all the good that these mixtures (which people credit with possessing such great healing power and which are looked upon by many as something precious) can do, consists:

1. In drawing the increased flow of blood, which so frequently produces pain in the unsound part of the body, away from that part and toward the stomach, or if the medicine is of a narcotic nature, in deadening the sensibility of the nerves, and so causing the pain to diminish for the moment.

2. In stimulating nature to excretion, by perspiration, increased flow of urine, or diarrhœa, because nature promptly makes an effort to eject from the system, by those processes, the poisonous or irritating medicines.

Consequently, it is not these inert bodies (the poisons and irritants) that have any effect, and that can, as it were, take hold of the excreta, the urine, the perspiration, and thrust them out of the body, but nature herself takes hold of the poison which has been introduced, and ejects it from the body through the medium of the excrement, urine, and perspiration; that is, if she is still strong enough to do so; if not, the poison remains in the system, and no effect is noticeable. This is the case with a good many medicines, and people then say: "The physic has not acted,"—the result usually being that nature is irritated with still stronger poisons. It is clear then that sweats, urination, stool, and excretions in

general, instead of being effected in the gentlest possible manner, as with our applications, are forced on in a violent and unnatural way.

It is not this alone, however, that invalidates these testimonials, but there are among them numbers of forged and falsified documents, and altogether a great deal of fraud is perpetrated in this line. In proof of that allegation, I will cite some of the swindles and the falsehoods that have been exposed.

FORGED TESTIMONIAL, PUBLISHED IN DIFFERENT JOURNALS ON THE CURE OF CONSUMPTION (TUBERCULOSIS).

This terrible disease, which annually consigns thousands of people to an untimely grave, is curable even in the most desperate cases. After many researches, extending over a number of years, I have succeeded at length in finding a cure for this disease which hitherto has been dreaded as the scourge of mankind, attacking and carrying off, as it does, mostly young persons, full of promise, in the early spring of life.

Although it is impossible for me to replace lungs already destroyed by the bacteria, still the testimonials which I daily receive, prove conclusively that my method of cure destroys these dangerous fissiparous, or self-propagating fungi, *i. e.*, denies them the congenial soil necessary for the propagation of the bacteria, and, by curing the disease, preserves the patient to his family for years.

Cough and expectoration are not always signs of consumption; but it is oppression, pains in the chest, back and sides, emaciation, debility and night sweats, etc., that in many cases are symptoms of tuberculous consumption, which, as a rule, is only noticed when the work of destruction in the lungs has already advanced so far as to cause difficulty of breathing and a faint, weak voice. The bacteria have then long had a firm hold; their work of annihilation has begun, and it is high time to apply my method in order to be convinced, by the relief afforded to the patient a few days after its application, that cure will ultimately result from it. Applications in writing are requested by

Dresden, 29, II, Marschall Strasse. *Richard Berger.*

P. S.—On request I will send to anyone copies of hundreds of testimonials gratis and prepaid.

Testimonial.

Dear Mr. *Berger:*

In praise of your excellent art I impart to you the joyful news that my son has been completely cured of consumption by your treatment. I feel prompted, in consequence, to make this case publicly known, that every despairing patient may learn where there is yet help in store for him. It shall henceforth be my endeavor to recommend your treatment to the fullest extent within my power. Pray accept herewith the heartiest thanks of my family, which you have rendered happy.

With grateful devotion, yours, etc.,

Crotenlaide, *C. A. Eichler* and Family,
near Meerane, in Saxony.
April 3, 1886.

The above testimonial is, however, as already stated, a swindle. Mr. *Eichler's* son never recovered, and death released him from his sufferings on March 10th, 1885; and Mr. *Eichler* never gave *Berger* a testimonial, as he assured me himself, especially as his son died very shortly after *Berger's* medicine reached him. The letter of acknowledgment published by Mr. *Berger*, in which he deludes the public into the belief that he cured Mr. *Eichler's* son—who had been buried a whole year,—is, therefore, an impudent fraud and falsehood. Anyone will know sufficiently, from this proceeding, what to think of Mr. *Berger* and similar quacks.

Who knows what numbers of testimonials of successful cures of people, long deceased and who never found relief, to-day make the round of the papers.

Besides simply forged testimonials, there are a vast number which are to a great extent misrepresented to the advantage of these quacks, etc. Alas! there are a great many such nowadays, and I give two cases, having reference to the subject, and which have been taken from our daily newspapers.

The Police Courts.

Interesting disclosures of the practice of a quack, who calls himself a natural healer in his pamphlets, came to light a short time ago before the 87th Section of the Police Courts in Berlin.

Mr. *William Becker*, having what he called a medical office in Moabit, was accused by the Public Prosecutor of being a common cheat and impostor. Whereas Mr. *Becker* pretented, in pamphlets which he sent out by hundreds of thousands, to cure nearly every disease and infirmity that flesh is heir to, by means of his false "natural method,"

the prosecution maintained, on the strength of the opinions of scientific men, that the accused is a quack, who is merely speculating on people's credulity, and whose prescriptions are in many cases not only absolutely useless, but injurious and dangerous to life. About half a dozen of these cases are cited, making the assertion good. The accused is in correspondence with patients by letter only; after the sufferers, who have swallowed the bait, have filled up a form containing questions respecting their illness, and duly paid $1.25 as a preliminary fee. The evidence proved that the accused had in various cases jeopardized his patient's life and health to a dangerous extent. He had previously infringed the penal code many times, and had been fined repeatedly for "usurping the title of doctor," for quackery, and for carrying on traffic in medicines. He admitted himself that he had realized a clear profit of $11,250 within six months; the sheet *(The Flying Adviser)*, which he published monthly, for the purpose of puffing his nostrums, inundated the German empire to its most extreme limits with 400,000 copies. He explained that about thirty prescriptions were daily made out by him and his men, and compounded by the chemist, Mr. *Richnow*, owner of the Flora dispensary. It was the latter's business to pack up the medicines, according to postal regulations, and to send them to the patients through the forwarding agent *Friedrich*.—The public prosecutor characterized the defendant's procedure as one fraught with great public danger, meriting severe punishment, and he demanded that a sentence should be pronounced of one year's imprisonment and two years' loss of civil rights. The verdict was conformable with that request, and the accused was at once imprisoned, though offering to give bail to the extent of 2,500 dollars.

The following chapter from the great comedy of quackery, lately occupying the lower chamber of the Berlin High Courts of Justice, is also of interest. *Edmund Buehlingen*, formerly a hair-dresser, is one of those clever people who cause men's hair to grow, at least, to judge from the boasting advertisements that he sent forth into the world. The "hair specialist" *B.* had most gratifying experiences in Leipsic, anent the success of his quackeries, till the authorities looked a little closer into his proceedings and earned the gratitude of the public by inflicting eighteen months' imprisonment upon him. He removed after this to Rixdorf, but had to turn out, and he then settled in Berlin, Solms Strasse, opening an institution for the promotion of hair-growing on people's heads. His books showed a monthly income of many thousands of dollars. *B.* set about his business most cunningly.—Years ago he appears to have had under his treatment a Silesian clergyman, whose forehead was so extraordinarily high as to reach right over his head

down to his neck. *B.* had treated him with his soap for the head, and with his pomatum, and, after a lapse of about eight months, the reverend gentleman saw, to his unbounded delight, his hair beginning to grow again. He wrote out a splendid testimonial to the "hair specialist," but confessed afterward, in his evidence at the trial, that he had thought later on that the defendant's wonderful nostrum had had nothing whatever to do with the growth of his hair, but that other agencies had contributed to that welcome result.

This clerical gentleman and his testimonial served as the pivot on which *B.* turned his machinations. Advertisements appeared, setting forth that an aged minister of religion, baldheaded for many years, had had his hair restored by a simple remedy, and was able to throw his wig to the winds. Letters to be addressed "Parson," Post Office, etc. That took. Numbers of baldheads received from the clever magician a small case, the price of which was three dollars, containing —besides a bottle of mixture—a little box of pomatum and a tiny piece of soap, respecting which the advertisement said: "My really genuine Tannin-balsam soap, for the embellishment of the skin, is a universal sanitary soap." The result being, however, in every case absolutely nil, the Public Prosecutor saw in this quackery the grossest swindle and impeached our hero. The chemical analyst, Dr. *Bischoff*, proved that the mixture was a compound of tincture of arnica, oily fluids, and that the pomatum consisted of lard and flower of sulphur. As for the Tannin-balsam soap,—which, by the way, was not "my" (B.'s) soap at all, but was obtained from the firm *Schlimpert & Co.*, —it did not contain an atom of tannin. The entire value of the whole case, mixture and all, amounted to about 15 cents. The Public Prosecutor, Mr. *Wagner*, held the swindle proved and demanded a sentence of twelve months' imprisonment. The court adjudged the accused, who had been in prison already for four months pending the trial, to six months' imprisonment and twelve months' loss of civil rights.

I wonder whether sufferers in some other land will again fall victims to a similar swindle, when *B.* has once more the prison doors behind him?

One more case, to complete and strengthen this chapter. The Council of Meerane, in Saxony, issued the following warning in the *Meerane Weekly* of March 7th, 1893:

. A WARNING.

"WARNER'S Safe Cure."

A pamphlet has lately been published in this town by a firm named *Warner* for the purpose of drawing people's attention to their remedy, "Safe Cure." This nostrum is stigmatized in the official collection of reports of the Local Sanitary Council in Karlsruhe in the following terms:

"By sowing broadcast puffing prospectuses, *H. W. Warner & Co.*, Frankfort on the M., advertise a vaunted wonder-working remedy, under the name of *"Warner's Safe Cure."* This nostrum is puffed as a remedy and cure for all complaints of the kidneys, liver and urinary organs; for jaundice, bilious fever, debility, impotence, heart disease, melancholia, malaria, pains in the back, gout, rheumatism, convulsions, gravel, dropsy, ***Bright's*** disease, uterine and other female complaints. It consists of a decoction of noble-liverwort with the addition of saltpetre, glycerine and alcohol in a rather weak solution and in comparatively small quantities; the whole scented with oil of evergreen. In conjunction with this liquor sugar-coated aloe pills are to be taken. The salutary effect, ascribed in a pamphlet, furnished with numerous illustrations, to both these remedies, is absolutely nil, and public attention is drawn to the fact that there does not exist a universal remedy for all the diseases enumerated above, and that they are, besides, quite illogically, named and classified in the advertisements of *Warner & Co.*

"Warner's Safe Cure" is manufactured by two managers of the firm of *Warner & Co.*, in Rochester, England, namely *A. Kennard* and *Anton S. Wehner*, in Frankfort on the M. It is elegantly packed, and sent to chemists and to private people. It is characteristic of this quack medicine that it bears on the cover more than once the representation of a safe as trade-mark. The price by far outbalances the intrinsic value of the nostrum. The public are warned not to buy this worthless remedy.

The Council, Dr. ***Ebeling,*** Mayor.

A like proceeding might be adopted against swindlers with patent medicines by the local authorities of every city.

THE OPPONENTS OF THE NATURAL METHOD OF HEALING.

By Dr. C. STURM, Berlin.

(From "The People's Doctor," organ for hygiene and natural therapeutics.)

It is a very strange fact that man's common sense plays such a subordinate part in therapy and that, in spite of the most peculiar methods of cure at present in existence, there is not one that considers itself in duty bound to supply us with any kind of justification.

If only a spark of reasoning power were applied, it would soon be understood that our organism, when interrupted in its functions in any part of the body, by injurious external influences, as, for example, wrong diet,—tries at once with all its power to rectify the irregularity, introduced or caused by the injury, and to directly excrete accumulated morbid matter, and that it would easily fulfil this task if it were not continually interfered with. But if we daily expose it to lesser or graver influences, and thus continually allow it to be deranged, we must not be astonished to find, when some insidious outside influence makes itself felt on a larger scale, that our organism cannot cope with it to the same extent as when the body is in a perfectly healthy condition.

For the same reasons will a delicate person, in a weakened condition, before being attacked by some violent disease, such as inflammation of the lungs, suffer much more severely than a strong person more capable of resisting the disease.

Besides, violent external influences naturally cause more serious maladies than only slight ones.

Nature's endeavor to restore the balance of health must be the subject of our first consideration, if we wish to discuss the way in which it is possible to combine for the rescue of our fellow creatures.

We are, above all, impressed with the duty of investigating the injurious influences which lead to disease, and which have actually led to it in the individual case before us, or which may, in other cases, have added fresh fuel to support an existing malady. It is naturally therefore our task, on the one hand to ward off all injurious influences likely to disturb the vital force in the exercise of its functions, and, on the other, to further those functions.

Proceeding thus, we shall from the very outset be free from falling into the error of mistaking symptoms of a malady for the malady itself, and we shall then understand that diseases are nothing less than irregularities produced, during the process of food-assimilation in the digestive organs, by injurious external influences, and that such disturbance of the food-assimilation leads to the most varied forms of trouble and complaints. We shall then no longer be astonished at the fact that an abscess, for example, is not an illness, but merely nature's way of informing us that she is ejecting unhealthy humors from the body.

Watching her wonderful methods, we shall be enabled to see, not only how she has provided the abscess with a skin covering, which keeps its rough and acrid contents from contact with the delicate inner parts of our organism, and under which the vital force is at work; we shall at the same time find that the abscess requires a still stronger covering,

in itself harmless and designed only as a protection against injury from without.

We shall see, moreover, that internal medicines—whether homœopathic or allopathic—only interfere with the action of the vital force, call forth fresh disturbances in the system and thus force nature to increase her action, and that (unless she is equal to the task of effecting her beneficent purpose) they (the medicines) are provocative of a second illness, superadded to the original one, namely: that produced by themselves. Where this is not the case, as with homœopathic and electro-homœopathic remedies, such a proceeding must be characterized as a mere useless, childish proceeding, entailing only loss of time.*

Most people have, by nature, a wholesome horror of being poisoned by physic, but they have, moreover, an in-born indifference to everything that has no direct relation to money-earning; even the preservation, or the recovery, of their health prevents them from informing themselves on the subject of true therapy and its mission, and about the humbug of medicine, etc., because, to be sure, they would have to read books and listen to lectures.

That is too much trouble for them, and for that reason they abandon the care of their sick bodies to the first comer, at once giving him credit for a full knowledge of the subject.

But if they intend to turn their back upon medical poisoning, because both common sense and the sad havoc wrought by allopathy in illness make it advisable for them to do so, they rush into the arms of homœopathy, or give themselves up, hand and foot, to the blandishments of some quack or swindler, who is flaunting in their face the enticing flag of the "Natural Method of Healing." But it is exactly the above-named methods which do such enormous injury to the spread of the one true "Natural Method of Healing."

For when a patient has passed through a stereotyped treatment of, say Dr. *Airy's* "Natural Method of Cure," he thinks that there is only that one natural method in existence; and, having perchance received great injury from it, he considers himself justified in condemning anything bearing the same name; he does not trouble himself further about any books or lectures, which might give him an insight into the true treatment; and which would teach him that we have no such thing as a stereotyped form for all cases, but that we know how to adapt our applications to each individual patient; and that Dr. *Airy's* method is nothing but medical quackery, and no remedy at all.

***) This dictum is not only true of therapy, but also of other subjects dwelt on in my work, "How to Improve the Times."**

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in front shows the blood vessels of the head.

37. The great carotid artery, which divides itself, at the level of the upper edge of the larynx, into the exterior and interior carotid. If the smaller fold is raised,
38. Shows the superficial temporal artery.
39. The upper thyroid gland artery, *laryngea superior*. Other important blood vessels are:
40. The exterior maxillary artery.
41. The occipital artery.
42. The transverse facial artery.

Next, on the back of the small fold:

43. The interior maxillary artery.
44. The middle artery of the *dura mater*, or hard membrane of the brain.
45. The artery leading to the roof of the mouth, downward; *nas opalatina.*
46. The nasal artery, *nasalis.*
47. (On the larger fold.) The jugular vein, the great vein of the throat.
48. The facial nerve, with its branches, which actuate the facial muscles. Passing from the outer to the inner structure, we find, on a section through the middle of the head (see both sides of the inner small attached fold):
49. The *corpus callosum*, joining the cerebral hemispheres.
50. The *knee* of the *corpus callosum.*
51. The *splenium*, part of the *corpus callosum.*
52. The *fornix*, bony arch of the brain.
53. The third ventricle of the brain.
54. The *cerebellum*, "tree of life" in the.
55. The Pons Varoliic.
56. The *medulla oblongata*, continuation of the spinal cord.
57. The anterior cranial *fossa.*
58. The middle cranial *fossa.*
59. The posterior cranial *fossa.*
60. Pyramid of the *pars petroda* of the temporal bone.
61. Cavity of the sphenoid bone, *fossa pterygoidea.*
62. The canal of the spinal marrow, medullary canal.
63. The first cervical vertebra.
64. The seventh cervical vertebra.

The model shows, further, the most important parts of the upper air passages.

65. The *concha superior*, in the nose; upper shell, or turbinal bone.
66. The *concha media.*
67. The *concha inferior.*
68. Section of the hard palate.
69. Pharyngeal opening of the Eustachian tube.
70. The uvula.
71. The pharyngeal cavity of the nose.
72. The pharynx.
73. The muscles of the tongue.
74. The tongue bone (see also 88).
75. The larynx.
76. The epiglottis.
77. The false vocal chords.
78. The vocal chords.

On the background of the model, in the center of the sheet, is shown the right side of the head; the skin and part of the skull being removed.

79. The brain, *cerebrum.*
80. The frontal lobe of the brain.
81. The coccipital lobe.
82. The temporal lobe.
83. The *cerebellum.*
84. The parotid gland, with its duct.
85. The tongue.
86. The sub-lingual gland.
87. The sub-maxillary gland.

The ducts of 86 and 87 unite in the floor of the mouth.

88. The tongue, or hyoid bone.